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The Public Health Case for the Safe Storage of Firearms: Adolescent Suicides Add One More Smoking Gun

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The Public Health Case for the Safe
Storage of Firearms: Adolescent Suicides
Add One More “Smoking Gun”

by
ANDREW J. MCCLURG*

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Introduction

Millions of loaded and unlocked firearms sit in homes throughout America, easily accessible to unauthorized, dangerous users. Public health research, including ten different studies discussed in this Article,¹ shows that shockingly high percentages of gun owners negligently store the most dangerous consumer product legally obtainable. One recent study of all fifty states estimates that 6.8 million U.S. households contain at least one loaded, unlocked gun,² including 1.6 million households with children.³ Another study found that more than 50% of handguns are stored unlocked.⁴ A survey of 12,000 adolescents revealed that guns were "easily accessible" in 24% of the participants' homes.⁵

Unsecured guns invite firearms tragedy of all types. Hundreds of children die in accidental shootings each year in this country.⁶ A quarter-million guns are stolen in burglaries annually, going directly to criminals.⁷ The author has previously argued for safe gun storage laws as a means for reducing both accidental and intentional third-party shootings.⁸ This Article presents a compelling case that legislatively-mandated safe firearms storage would also help stem the

1. See *infra* notes 255-351 and accompanying text.

2. See Gail Stennies et al., *Firearm Storage Practices and Children in the Home, United States, 1994*, 153 ARCHIVES PEDIATRICS ADOLESCENT MED. 586, 588 (1999). See *infra* notes 337-351 and accompanying text.

3. See Stennies et al., *supra* note 2, at 588.

4. See Yvonne Senturia et al., *Children's Household Exposure to Guns: A Pediatric Practice-Based Survey*, 93 PEDIATRICS 469, 471 (1994) [hereinafter Senturia et al., *Household Exposure*]. See *infra* notes 273-277 and accompanying text.

5. See Michael D. Resnick et al., *Protecting Adolescents from Harm: Findings from the National Longitudinal Study on Adolescent Health*, 278 JAMA 823, 828 (1997). See *infra* notes 194-197 and accompanying text.

6. In 1995, the most recent year for which figures are available, 440 children and teens were killed in accidental shootings. See Dianne R. Stepp, *School Watch: Students Signing "No-Guns" Pledge*, ATLANTA CONST., Oct. 15, 1998, at 4JG. In 1994, firearms accidents were the fifth leading cause of accidental death for children under 14. See Cortney McClelland et al., *Assessing Firearm Safety in Inner-City Homes*, 17 N & HC: PERSP. ON COMMUNITY, OFFICIAL PUBLICATION NAT'L LEAGUE FOR NURSING 174, 175 (1996).

7. Between 1985 and 1994, an annual average of 274,000 firearms were reported stolen to the FBI. See MARIANNE W. ZAWITZ, BUREAU JUST. STAT., U.S. DEP'T JUST., GUNS USED IN CRIME, NCJ-148201, at 3 (1995).

8. See generally Andrew J. McClurg, *Child Access Prevention Laws: A Common Sense Approach to Gun Control*, 18 ST. LOUIS U. PUB. L. REV. 47 (1999) [hereinafter McClurg, *Child Access Prevention Laws*]; Andrew J. McClurg, *Armed and Dangerous: Tort Liability for the Negligent Storage of Firearms*, 32 CONN. L. REV. 1189 (2000) [hereinafter McClurg, *Tort Liability for the Negligent Storage of Firearms*].

rising tide of adolescent suicide, one of the most horrific of all gun-related statistics.⁹

Suicide is the second leading cause of death among youths between the ages of fifteen and nineteen,¹⁰ and the third leading cause of death for youths aged fifteen to twenty-four.¹¹ In 1994, the most recent year for which statistics are available, 2270 persons under age twenty committed suicide.¹² While the overall suicide rate in the United States has remained relatively stable since 1950, the rate of suicide for adolescents has more than tripled.¹³

Firearms account for 60% of all suicides in this country,¹⁴

9. Fourteen states already have a form of safe storage law known as a Child Access Prevention ("CAP") law. *See infra* note 356 for citations to state CAP laws. CAP laws impose criminal penalties for negligently storing a firearm if a child gains access to the gun and uses it to cause harm. While the author supports CAP laws, this Article takes the position that they contain too many limitations to be effective in keeping firearms out of the hands of unauthorized users and that stronger, mandatory safe storage laws are necessary to achieve that goal. *See infra* notes 352-382 and accompanying text.

10. *See* Keith A. King et al., *High School Health Teachers' Perceived Self-Efficacy in Identifying Students at Risk for Suicide*, 69 J. SCH. HEALTH 202, 202 (1999).

11. *See id.*

12. *See id.*

13. *See id.* Between 1950 and 1993, the U.S. suicide rate for children aged 15 and younger quadrupled. *See* CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEP'T HEALTH AND HUM. SERVICES, REP. NO. 5, RATES OF HOMICIDE, SUICIDE, AND FIREARM-RELATED DEATHS AMONG CHILDREN-26 INDUSTRIALIZED COUNTRIES, 46 MORBIDITY & MORTALITY WKLY REP. 101, 101 (Feb. 7, 1997) [hereinafter CENTERS FOR DISEASE CONTROL AND PREVENTION, 26 INDUSTRIALIZED COUNTRIES]. Between 1980 and 1992, the suicide rate for youths aged 10-14 increased by 120% (from 0.8 to 1.7 per 100,000 persons). *See* CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEP'T HEALTH AND HUM. SERVICES, REP. NO. 15, SUICIDE AMONG CHILDREN, ADOLESCENTS, AND YOUNG ADULTS-UNITED STATES, 1980-1992, 44 MORBIDITY & MORTALITY WKLY REP. 289, 289 (Apr. 21, 1995) [hereinafter CENTERS FOR DISEASE CONTROL AND PREVENTION, SUICIDE AMONG CHILDREN]. For youths aged 15-19, the suicide rate increased by 28.3% during the same period (from 8.5 to 10.9 per 100,000 persons). *See id.*

14. *See* Butch M. Huston et al., *Three Cases of Fatal Firearm Use Following External Hinge Removal from Locked Gun Cabinets*, 43(1) J. FORENSIC SCI. 956, 956 (1997); *see also* John Fox et al., *Increasing Use of Firearms in Completed Suicides in Wisconsin, 1979-1994*, 95 WIS. MED. J. 283, 283 (1996) (stating that the firearm suicide rate in Wisconsin increased by 20% during a 16-year study period; percentage of suicides involving firearms increased from 48% between 1979 and 1983 to 57% between 1990 and 1994).

Firearms predominate as the method of successful suicide attempt for both men and women. *See* Frederic Seltzer, *Trend in Mortality from Violent Deaths: Suicide and Homicide, United States, 1960-1991*, 75 STAT. BULL. 10, 14 (1994). In 1991, firearms and explosives accounted for 65% of male suicide deaths and 40% of female suicide deaths. *See id.* Poisonings were the second most common method of completed suicide attempts for women (37%), while hanging ranked second for men (15.1%). *See id.* Hanging ranked third for women (13.4%) and poisonings ranked third for men (13%). *See id.* Jumping ranked fourth for both genders (2% for men and 3.5% for women). *See id.*

including youth suicides,¹⁵ even though they are used in only a small percentage of suicide attempts.¹⁶ The firearm suicide rate in the United States for children under age fifteen is eleven times higher than that of any industrialized nation in the world.¹⁷ The dramatic escalation in adolescent suicide rates¹⁸ is accounted for almost entirely by an increase in the use of firearms as the method of suicide attempt, with little rise in suicides by other means.¹⁹ Between 1980 and 1992, guns accounted for 81% of the increase in the suicide rate for persons between the ages of fifteen and nineteen.²⁰

15. See David A. Brent et al., *Firearms and Adolescent Suicide: A Community Case-Control Study*, 147 AM. J. DISEASES OF CHILDREN 1066, 1066 (1993) [hereinafter Brent et al., *Firearms*]. See *infra* notes 178-190 and accompanying text for more detailed discussion of this Article.

16. See *infra* notes 74-79 and accompanying text for relative percentages of different suicide methods to total attempts. The National Center for Health Statistics recognizes 44 general methods of suicide. See generally GEORGE HOWE COLT, *THE ENIGMA OF SUICIDE* 233 (1991). However, suicide attempters have invented dozens of other grisly methods through the ages. Colt compiled this list of recorded unconventional suicide methods:

Over the past two centuries, people have committed suicide by jumping into volcanoes, vats of beer, crocks of vinegar, retorts of molten glass, white-hot coke ovens, or slaughterhouse tanks of blood; by throwing themselves upon buzz saws; by thrusting hot pokers down their throats; by suffocating in refrigerators or chimneys; by locking themselves into high-altitude test chambers; by crashing airplanes; by jumping from airplanes; by lying in front of steamrollers; by throwing themselves on the third rail; by touching high-tension wires; by placing their necks in vises and turning the handle; by hugging stoves; by freezing to death; by climbing into lions' cages; by blowing themselves up with cannons, hand grenades or dynamite; by boring holes in their heads with power drills; by drinking hydrochloric acid or Drano; by walking in front of cars, trains, subways, and racehorses; by driving cars off cliffs or into trains; by swallowing poisonous spiders; by piercing their hearts with corkscrews or darning needles; by starving themselves; by swallowing firecrackers; by holding their heads in buckets of water; by beating their heads with hammers; by pounding nails or barbecue spits into their skulls; by strangling themselves with their hair; by walking into airplane propellers; by swimming over waterfalls; by hanging themselves with grapevines; by sawing tree limbs out from under themselves; by swallowing glass; by swallowing underwear; by stabbing themselves with spectacles sharpened to a point; by cutting their throats with handsaws, sheep shears, or barbed wire; by forcing teams of horses to tear their heads off; by decapitating themselves with homemade guillotines; by exposing themselves to swarms of bees; by injecting themselves with paraffin, cooking oil, peanut butter, mercury, deodorant, or mayonnaise; by crucifying themselves.

Id. at 235-36.

17. See Etienne G. Krug, *Childhood Homicide, Suicide, and Firearm Deaths: An International Comparison*, 49 WORLD HEALTH STAT. Q. 230, 232 (1996) (study of 27 countries and areas).

18. See *supra* note 13 and accompanying text.

19. See Brent et al., *Firearms*, *supra* note 15, at 1066.

20. See CENTERS FOR DISEASE CONTROL AND PREVENTION, *SUICIDE AMONG*

A substantial body of public health evidence links the ready availability of firearms, especially in homes, to suicides generally and to adolescent suicides in particular.²¹ Even without the studies, common sense informs us that ready availability of the most lethal method of suicide to a population group marked by immaturity, impulsiveness, and shortsightedness is a dangerous mix. Adolescent firearm suicides are a natural and probable consequence of the coalescence of four factors: (1) firearms are the most lethal method of suicide attempt, succeeding in at least 85% of attempts;²² (2) firearms are present in at least 40% of all American households;²³ (3) 90% of all suicide attempts by adolescents occur in the home;²⁴ and (4) millions of firearms kept in homes are negligently stored.²⁵

This Article argues for passage of safe storage laws requiring that firearms be securely stored at all times, when not in use, as a means of reducing adolescent suicides. Part I discusses how suicide has been largely ignored in the gun control debate, despite the fact that the majority of firearms deaths in America result from suicide. Part II analyzes the link between firearms and higher suicide rates as established by eleven public health studies. Part III discusses ten additional public health studies showing that millions of guns are unsafely stored in American homes. Part IV argues in favor of legislatively-mandated safe firearms storage as a partial solution to adolescent suicides and other gun-related tragedies. Part V, the conclusion, offers brief closing thoughts.

I. Suicide: The Forgotten Statistic in the Popular Gun Control Debate

Littleton, Colorado,²⁶ Conyers, Georgia,²⁷ Springfield, Oregon,²⁸

CHILDREN, *supra* note 13, at 289.

21. See *infra* notes 81-199 and accompanying text (summarizing 11 public health studies establishing a link between firearms availability and suicide).

22. See GEO STONE, SUICIDE AND ATTEMPTED SUICIDE: METHODS AND CONSEQUENCES 148 (1999). See *infra* notes 65-80 and accompanying text for additional discussion of the lethality of firearms as a suicide method.

23. See Mark S. Kaplan & Olga Geling, *Firearm Suicides and Homicides in the United States: Regional Variations and Patterns of Gun Ownership*, 46 SOC. SCI. MED. 1227, 1230 (1998). Gun ownership varies by region. This study found that the percentage of homes with firearms ranged from a low of 38.6% in New England to a high of 70% in the East South Central United States, a region made up of Alabama, Kentucky, Mississippi, and Tennessee. See *id.*

24. See STONE, *supra* note 22, at 42.

25. See *infra* notes 255-351 and accompanying text.

26. See Richard A. Serrano, *Gunmen Had Help, Police Fear*, L.A. TIMES, Apr. 23, 1999, at 1A (detailing mass school shooting in Littleton, Colorado resulting in 15 dead, including assailants, and 23 injured).

27. See Sue Anne Pressley, *Ga. Teenager's Motivation Is Still a Mystery; Classmate*

Jonesboro, Arkansas,²⁹ Paducah, Kentucky,³⁰ and Pearl, Mississippi³¹—these small towns provide a tragic American geography lesson on the consequences that can result from allowing disturbed children easy access to firearms. The mass school shootings shocked the consciousness and conscience of America and captured our attention as few events can. A NEXIS computer search discloses more than 188,000 news stories discussing the six school shooting incidents.³² Most members of the public can connect by name the previously obscure school shooting sites with the events that occurred there. The image of students fleeing, arms raised over their heads, from Columbine High School is indelibly etched into our collective psyche. *USA Today* published more words about the Columbine shootings in the week following the event than it did about the war in Kosovo in the week following the initiation of NATO air strikes.³³

However, as tragic as the school shootings were, they pale in comparison to the toll wrought by firearm suicides, which continue hour by hour around the clock, day in and day out, virtually unnoticed and ignored. The number of articles appearing in the NEXIS database concerning the six school shooting incidents is twice the number of articles concerning the entire topic of firearms and suicide in all contexts.³⁴ To appreciate how out of balance this attention is, consider that the six school shooting incidents resulted in

Says He Told School of Gun Incident, WASH. POST, May 23, 1999, at A3 (detailing mass school shooting in Conyers, Georgia in which six students were injured).

28. See Timothy Egan, *Shootings in a School: The Overview; Oregon Student Held in 3 Killings; One Dead, 23 Hurt at His School*, N.Y. TIMES, May 22, 1998, at 1A; Timothy Egan, *Shootings in a Schoolhouse: The Overview; Oregon Freshman Goes to Court As Number of Deaths Rises to 4*, N.Y. TIMES, May 23, 1998, at 1A (detailing mass school shooting in Springfield, Oregon resulting in two dead and 22 injured; assailant's parents also killed).

29. See John Schwartz, *Boys' Ambush at Ark. School Leaves 5 Dead; Suspects are 11 and 13; 11 Wounded*, WASH. POST, Mar. 25, 1998, at A1 (detailing mass school shooting in Jonesboro, Arkansas resulting in five dead and 11 injured).

30. See Rick Bragg, *Forgiveness, After 3 Die in Shootings in Kentucky*, N.Y. TIMES, Dec. 3, 1997, at 16A (detailing mass school shooting in Paducah, Kentucky resulting in three dead and five injured).

31. See J.R. Moehringer, *"Mastermind" Allegedly Ordered High School Shootings*, L.A. TIMES, Oct. 15, 1997, at A25 (detailing mass school shooting in Pearl, Mississippi resulting in two dead and seven injured; assailant also killed mother).

32. A search of NEXIS, NEWS library, MAGS, MAJ PAP, and PAPERS files (using the search terms: "Columbine or Conyers or Springfield or Jonesboro or Paducah or Pearl and Shoot! or kill! or firearm or gun or handgun or rifle or shotgun") on January 24, 2000, produced precisely 188,714 hits. There are some "false positives" in this list.

33. See Jeff Pooley, *Measuring the Coverage: Kosovo v. Littleton*, BRILL'S CONTENT, July/Aug. 1999, at 52 <http://www.brillscontent.com/notebook/measuring_0899.html>.

34. In comparison to the 188,714 articles addressing the school shooting incidents mentioned, see *supra* note 32, a NEXIS search turned up 94,600 articles mentioning guns and suicide. There are also some false positives in this list.

a total of twenty-seven fatalities, whereas forty-six people commit suicide with firearms in the United States every twenty-four hours.³⁵

Suicide is the forgotten statistic in the popular gun control debate.³⁶ Most people are surprised to learn that annual firearm suicides routinely outpace firearm homicides. In 1996, the most recent year for which figures are available, 18,166 Americans committed suicide with a firearm, substantially more than the 14,327 victims of homicide by firearm the same year.³⁷ Firearm suicides have exceeded firearm homicides in forty of the sixty years between 1933 and 1992.³⁸ For all our fear of being victims of a violent criminal attack, "[i]f a randomly chosen person adds up the probabilities that each of the 5 ½ billion other people in the world will kill her, the sum . . . is still less than the probability she'll kill herself."³⁹

The lack of media and other public attention to the social ill of suicide in general and firearm suicides in particular, while regrettable, is understandable. Suicide has long been a taboo topic that causes us discomfort, for at least four reasons. First, suicide has religious implications. Although early Christians glorified suicides that were

35. At least 17,000 people in the United States commit suicide by firearm each year. THE EDUCATIONAL FUND TO END HANDGUN VIOLENCE & THE COALITION TO STOP GUN VIOLENCE, THE UNSPOKEN TRAGEDY: FIREARM SUICIDE IN THE UNITED STATES, (1995) (copy on file with author). The figure quoted in the text was arrived at by dividing 17,000 by the 365 days in a year.

36. See *Unanswered Questions About Suicide*, 4 C.Q. RESEARCHER 514, 514 (1994) [hereinafter *Unanswered Questions*] (stating that media cover gun violence with morbid fascination, but studiously avoid the topic of suicide).

37. See KIMBERLY D. PETERS ET AL., NAT'L CENTERS FOR HEALTH STAT., *Deaths: Final Data for 1996*, 47 NAT'L VITAL STAT. REP., 67, 67 (1998). Most suicide completers are white males. In 1994, white males accounted for 73% of all suicides. See Arlene Metha et al., *Youth Suicide Prevention: A Survey and Analysis of Policies and Efforts in the 50 States*, 28(2) SUICIDE & LIFE-THREATENING BEHAV. 150, 150 (1998). White females accounted for 18% of all suicides in the same year. See *id.* Thus, whites accounted for more than 90% of all suicide completers. See *id.* However, between 1980 and 1994, the largest increase in suicide rates was for black males. See *id.* In 1980, the suicide rate for whites aged 10-19 was 157% greater than the rate for blacks, but by 1995 the rate for whites was only 42% greater than the rate for blacks. See CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEP'T OF HEALTH AND HUM. SERVICES, REP. NO. 10, SUICIDE AMONG BLACK YOUTHS—UNITED STATES, 1980-1998, 47 MORBIDITY & MORTALITY WKLY REP. 193, 193 (Mar. 20, 1998) [hereinafter CENTERS FOR DISEASE CONTROL AND PREVENTION, SUICIDE AMONG BLACK YOUTHS]. In the same period, the suicide rate for blacks aged 10-14 increased by 233%, compared to a 120% increase for whites. See *id.* As is true for all suicides, firearms are the predominant method of suicide for blacks, accounting for 66% of suicides for those aged 10-19. See *id.*

38. See Garen Wintemute et al., *The Choice of Weapons in Firearms Suicides*, 78 AM. J. PUB. HEALTH 824, 824 (1988).

39. John Allen Paulos, *Measuring American Society; A Better Chance You'll Shoot Yourself Than Be Shot by Another*, 6 PUB. PERSP. 17, 17 (1995).

committed in the cause of martyrdom,⁴⁰ by the end of the fourth century St. Augustine declared suicide a crime,⁴¹ a tenet that became incorporated into the Roman Catholic and Anglican churches.⁴² Church councils declared suicide to be a mortal sin inspired by the devil.⁴³ In seventeenth-century England, the estate of a person who committed suicide was forfeited to the crown and his body buried at a crossroads with a stake through the heart.⁴⁴ While attitudes towards suicide have historically been more liberal in the United States than in England, suicide remains deeply stigmatized.⁴⁵

Secondly, suicide is disturbing because it runs contrary to our ingrained belief that life is worth living at all costs.⁴⁶ Third, suicide is perceived to be a cowardly and selfish act through which the suicide completers escape pain only by inflicting tremendous pain and grief on their survivors.⁴⁷ Finally, it is difficult for persons who have never contemplated suicide to comprehend that a sane person could wish to end his or her own life. They see suicide as an irrational act committed only by "crazy" people.⁴⁸ For all of these reasons, suicide victims are often regarded with disgust or disdain rather than compassion. In teaching a law school course called *Gun Violence and the Law*, the author was shocked when a student callously responded to the factoid that 17,000 Americans commit suicide with firearms each year by stating: "Who cares about them?"

We should all care because any one of them could be our parent, child, brother, sister, lover, or friend. Suicidal ideation and suicide attempts are far more common than most people are aware.

40. See FRANCINE KLAGSBRUN, *TOO YOUNG TO DIE: YOUTH AND SUICIDE* 151 (1970).

41. See *id.*

42. See *id.* at 151-52.

43. See *id.* at 152.

44. See COLT, *supra* note 16, at 131. A man named Griffiths has the dubious distinction of being the subject of the last recorded suicide crossroads burial in 1823. See *id.*

45. See DAVID K. CURRAN, *ADOLESCENT SUICIDAL BEHAVIOR* 3 (1987) (stating American law has always been more liberal than English law towards suicide, but attitudes against suicide in the United States remain strongly negative).

46. In the Bible, Job declares: "Someone will give away all he has to save his life." *Job* 2:4 (New Jerusalem); see also STONE, *supra* note 22, at 73 (quoting Jacques Choron stating that suicide "troubles and appalls us because it so intransigently rejects our deeply held conviction that life must be worth living").

47. See KLAGSBRUN, *supra* note 40, at 143 (quoting unidentified participant in survey of attitudes toward suicide among college and high school students as stating: "[S]uicide can never be justified in that it does not affect one person only. It can have disastrous effects on family and friends, and a person should never have the right to inflict that kind of pain.").

48. See DAVID LESTER, *QUESTIONS AND ANSWERS ABOUT SUICIDE* 3 (1989) (stating there has been considerable discussion about whether suicide can be a rational act).

"Anyone can become suicidal when the situation producing the emotional pain is believed to be inescapable, never ending, and unbearable."⁴⁹ An estimated 20% of Americans contemplate suicide at some point in their lives.⁵⁰

The problem is more acute for youths. A 1997 survey of 16,262 high school students found that one in five students had seriously considered suicide in the previous year.⁵¹ A survey of 5000 rural teenagers revealed 40% had entertained suicidal thoughts at some point in their lives.⁵² Another study found that 62% of high school students sampled had experienced suicidal ideation or exhibited suicidal behavior.⁵³ Between 6% and 13% of adolescents report having attempted suicide at least once in their lives.⁵⁴

Adolescents see suicide as a quick and easy way to escape pain.⁵⁵ They lack the experience to understand that most pain is transitory or even that death is permanent.⁵⁶ Consider this sentiment expressed by a suicidal fifteen-year-old girl: "I want to kill myself, but I don't want to be dead. I mean, I want to be dead, but I don't want to be dead forever. I only want to be dead until my eighteenth birthday."⁵⁷ Relatively minor tribulations of everyday life—a breakup, bad grade, an argument, or the death of a pet—can be the triggering event for a suicide attempt.⁵⁸ A fourteen-year-old boy shot himself because he was upset about getting braces.⁵⁹ A young girl killed herself minutes after her father refused to let her watch a television show.⁶⁰ "For adolescents, the moment is everything," said psychiatrist Samuel Klagsbrun. "They think, 'I've got pain, and the pain is lasting for

49. Jorg J. Pahl, *The Rippling Effects of Suicide*, USA TODAY, Sept., 1996, at 62. Dr. Pahl is the Director of Research and Education, Mercy NeuroScience Institute, Mercy Hospital, Oklahoma City, Oklahoma. *See id.*

50. *See id.*

51. *See* Keith A. King, *Fifteen Prevalent Myths Concerning Adolescent Suicide*, 69 J. SCH. HEALTH 159, 160 (1999) (discussing results of 1997 Youth Risk Surveillance Survey).

52. *See id.* (discussing results of unpublished study).

53. *See* Ann F. Garland & Edward Zigler, *Adolescent Suicide Prevention: Current Research and Social Policy Implications*, 48 AM. PSYCHOLOGIST 169, 170 (1993).

54. *See id.*

55. *See* COLT, *supra* note 16, at 47; *see also* Editorial, *Guns and Adolescent Suicides*, 266 JAMA 3030, 3030 (1991) (stating that young people are impulsive and that suicide attempts may be intended to communicate their pain); Garland & Zigler, *supra* note 53, at 171 (discussing study finding most adolescent suicides are the result of "marked impulsivity"); *Unanswered Questions*, *supra* note 36, at 514 (stating adolescents are more prone to impulsive acts than are older people).

56. *See* COLT, *supra* note 16, at 47.

57. *Id.* (quoting unidentified 15 year-old suicidal girl).

58. *See id.* at 46-47 (listing each of these events as possible precipitating events to a suicide attempt).

59. *See id.* at 47.

60. *See id.*

more than two minutes—that means the pain will last forever.”⁶¹ In America, where more than 220 million privately-owned firearms⁶² are kept in 40% of all households,⁶³ two minutes may be too long.⁶⁴

Most suicides occur because people are in pain. It is not shameful to be unable to cope with despair. It is simply tragic. Suicide attempters deserve compassion, not condemnation. It is time for the media and our nation's gun policy makers to wake up and take notice of the devastating toll of firearms suicides.

II. No Way In, No Way Out—The Public Health Case for Securing Guns to Prevent Adolescent Suicides

A. The Most Deadly Means

Suicide attempts far outnumber completions.⁶⁵ Precise numbers are impossible to obtain because suicide and suicide attempts are under-reported.⁶⁶ Many attempts by methods of low lethality do not even require medical attention.⁶⁷ Overall, the most widely accepted estimated ratio is eight attempts for every completed suicide.⁶⁸ However, the success rate for suicides varies by age group.⁶⁹ Adolescents have a much higher ratio of unsuccessful suicide attempts to completions. As many as one million teenagers attempt suicide in the United States each year.⁷⁰ The estimated attempt-completion ratio for those between the ages of fifteen and twenty-

61. *Id.* (quoting psychiatrist Samuel Klagsbrun).

62. Private citizens in the United States own approximately 223 million firearms, including 77 million handguns. See Mark D. Polston & Douglas S. Weil, *Unsafe by Design: Using Tort Actions to Reduce Firearm-Related Injuries*, 8 STAN. L. & POL'Y REV. 13, 14 (1997).

63. See Kaplan, *supra* note 23 and accompanying text.

64. See Jim Autchmurey, *Living With Death; Gone Too Soon; The Growing Problem of Teen Suicide Haunts America*, ATLANTA CONST., Oct. 12, 1998, at 1C (describing an incident where a teenage girl, upset over a breakup with her boyfriend, shot herself in the head with a gun kept next to her boyfriend's bed).

65. See JUDITH M. STILLION & EUGENE E. MCDOWELL, *SUICIDE ACROSS THE LIFE SPAN* 103 (1996). Females attempt suicide three times as often as males, but males complete suicide four times as often as females. See Garland & Zigler, *supra* note 53, at 170. This difference is attributable largely to the choice of methods. See *id.* Males more often employ lethal methods such as firearms and hanging. See *id.* Nevertheless, use of firearms is the most frequent method of completed suicide for both sexes. See *id.*

66. See STILLION & MCDOWELL, *supra* note 65, at 103; see also Garland & Zigler, *supra* note 53, at 169 (stating suicide is under-reported due to religious implications, concern for family, and financial considerations regarding life insurance payments).

67. See STILLION & MCDOWELL, *supra* note 65, at 103.

68. See *id.*

69. See *id.*

70. See STONE, *supra* note 22, at 39.

four ranges from 100:1 to 200:1.⁷¹ This may be due in large part to the fact that most adolescent suicide attempters do not really want to die.⁷² In one study, only 12% of a group of 1103 adolescent suicide attempters stated in emergency room interviews that they wished to die as a result of their act.⁷³

Unfortunately, firearms allow few second chances. Guns are the most lethal method of suicide,⁷⁴ succeeding in eight or nine out of every ten attempts.⁷⁵ Firearms are responsible for 60% of successful adolescent suicides,⁷⁶ despite the fact that they are used in only a small percentage of attempts. An Oregon study of youth suicide rates found that firearms were successful in 78.2% of attempts, although they accounted for only 0.6% of total attempts.⁷⁷ In stark comparison, drug overdose was the chosen suicide method in 75.5% of attempts, but was successful only 0.4% of the time.⁷⁸ Perhaps most significantly, the study found that while firearms were used in only 0.6% of all attempts, they were responsible for 63.7% of all fatal attempts.⁷⁹ Firearms are used in more successful suicides in the

71. See STILLION & MCDOWELL, *supra* note 65, at 103.

72. See CURRAN, *supra* note 45, at 39 (stating that "a good deal of research and clinical experience" supports the proposition that most adolescent suicide attempters do not have a strong wish to die).

73. See *id.* at 40.

74. See STONE, *supra* note 22, at 147.

75. See *id.*; see also Jukka Hintikka et al., *Hunting Guns in Homes and Suicides in 15-24 Year-Old Males in Eastern Finland*, AUSTRALIAN & N.Z. J. PSYCHIATRY 858, 858 (stating firearm suicide attempts result in death in over 90% of cases); Ed Magnuson, *Suicides: The Gun Factor*, TIME, July 17, 1989, at 61 (citing 92% death rate from suicide attempts with guns and quoting sociologist James Wright: "Everyone knows that if you put a loaded .38 in your ear and pull the trigger, you won't survive.").

76. See Brent et al., *Firearms*, *supra* note 15 and accompanying text.

77. See CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEP'T HEALTH AND HUM. SERVICES, REP. NO. 16, FATAL AND NONFATAL SUICIDE ATTEMPTS AMONG ADOLESCENTS—OREGON, 1988-1993, 44 MORBIDITY & MORTALITY WKLY REP. 312, 315 (Apr. 28, 1995) [hereinafter CENTERS FOR DISEASE CONTROL AND PREVENTION, OREGON].

78. See *id.* For comparative purposes, here is how some common suicide methods ranked in the Oregon study by percentage of attempts and completions:

Drug poisoning: 75.5% of total attempts; .04% of attempts using this method resulting in death.

Gas poisoning: .2% of total attempts; 35.7% of attempts resulting in death.

Suffocation hanging: 2.4% of total attempts; 20.2% of attempts resulting in death.

Drowning: .1% of total attempts; 0% of attempts resulting in death.

Firearms: .6% of total attempts; 78.2% of attempts resulting in death.

Cutting/piercing: 11.1% of total attempts; 0% of attempts resulting in death.

Jumping from high place: .6% of total attempts; 0% of attempts resulting in death.

See *id.*

79. See *id.*

United States than all other methods combined.⁸⁰

B. The Firearms-Suicide Studies

Researchers have identified numerous factors that increase the risk of adolescent suicide,⁸¹ including the death of a parent,⁸² alienation from family,⁸³ rejection in love,⁸⁴ academic pressure,⁸⁵ gay or lesbian orientation,⁸⁶ and drug and alcohol abuse.⁸⁷ Mental disorder, especially depression, is the most common pathological symptom exhibited by suicidal adolescents.⁸⁸ Firearms are also a potent risk factor for adolescent suicide, which should come as no surprise given the lethality of firearms,⁸⁹ the abundance of unsecured firearms in millions of American households,⁹⁰ and the fact that 90% of all adolescent suicide attempts take place in the home.⁹¹

A large and growing body of public health evidence confirms that easy access to firearms significantly increases the risk of suicide.⁹²

80. See Arthur L. Kellermann et al., *Suicide in the Home in Relation to Gun Ownership*, 327 NEW ENG. J. MED. 467, 467 (1992).

81. Adolescent suicide victims are disproportionately white males. See David A. Brent et al., *Risk Factors for Adolescent Suicide*, 45 ARCHIVES GEN. PSYCHIATRY 581, 581 (1988) [hereinafter Brent et al., *Risk Factors*].

82. See Herbert Hendin, *Suicide Among the Young: Psychodynamics and Demography*, in YOUTH SUICIDE 19, 20-23 (Micheal L. Peck et al. eds., 1985).

83. See *id.* at 24-26.

84. See *id.* at 26-28.

85. See *id.* at 28-33.

86. See STILLION & MCDOWELL, *supra* note 65, at 108. Several studies have found that gay and lesbian adolescents face a much higher risk of suicide. See *id.* Stress factors relating to the rejection of homosexuality by social supports and the difficulties of coming to terms with sexual identity are believed to contribute to this higher rate. See *id.*

87. See *id.* at 106-07. One study found that 15-33% of adolescent suicide completers have a history of substance abuse. See *id.* at 107.

88. See *id.* at 106-08. Numerous studies have associated depression with adolescent suicide. See *id.* at 106 (listing studies). Other studies indicate that feelings of hopelessness are an important variable linking depression to suicide. See *id.* (listing studies). The studies show that feelings of hopelessness are a stronger determinant of the lethality of intent among suicide attempters than simply generalized depression. See *id.* The strongest overall predictor for suicide is a history of previous suicide attempts. See David C. Grossman, *Risk and Prevention of Youth Suicide*, 21 PEDIATRIC ANNALS 448, 449 (1992). Suicide victims are 20 to 30 times more likely to have engaged in a previous suicide attempt than controls. See *id.*

89. See *supra* notes 65-80 and accompanying text.

90. See *infra* notes 255-351 and accompanying text.

91. See STONE, *supra* note 24 and accompanying text.

92. Many of the public health studies in the field of firearms are funded by the U.S. Centers for Disease Control ("CDC"). See generally Gary Taubs, *Violence Epidemiologists Test the Hazards of Gun Ownership*, 258 SCIENCE 213 (1992) (discussing several such studies). The CDC decided to study violence as a public health problem in 1983, and it created a violence epidemiology branch to carry out the studies. See *id.* at 214. The CDC-funded studies, virtually all of which conclude by advocating greater gun control

These studies come in three forms pertinent to this Article: (1) studies showing that higher gun ownership rates correlate with higher suicide rates;⁹³ (2) studies showing that guns kept in the home substantially increase the risk of suicide;⁹⁴ and (3) most pertinent, studies showing that guns in the home greatly enhance the risk of suicide for adolescents.⁹⁵ The public health evidence connecting guns and suicide has never been collected in one place, a deficiency this section seeks to cure by reviewing eleven relevant studies. The summaries are not intended to be complete. Specifically, portions of the studies unrelated to firearms and suicide are not discussed. Readers interested in more details regarding the methodologies

or a reduction in the number of guns in homes, have generated vigorous attacks by pro-gun forces. See, e.g., Les Fisher, *Traditional Public Health Injury Control Does Not Apply to Violence*, 5 J. INT'L SOC. CHILD & ADOLESCENT INJ. PREVENTION 13, 14 (1999) (stating the National Rifle Association ("NRA") has succeeded politically in limiting the Government's public health response to firearms injury reduction by blocking appropriation bills for the CDC); Don B. Kates et al., *Public Health Pot Shots: How the CDC Succumbed to the Gun "Epidemic,"* REASON, Apr. 1997, at 25 <<http://reason.com/9704/fe.cdc.html>> (criticizing CDC-funded studies as being based on advocacy and political beliefs rather than scientific fact); Edgar A. Suter, *Guns in the Medical Literature—A Failure of Peer Review*, 83 J. MED. ASS'N GA. 133, 133 (1994) (criticizing alleged "errors of fact, design and interpretation" in CDC-funded studies); Taubs, *supra*, at 214 (discussing efforts of the NRA to shut down the CDC's firearms research).

Pro-gun forces refuse to acknowledge that firearm violence in the United States constitutes a public health issue worthy of study by the CDC. See Daniel D. Polsby, *From the Hip*, NAT'L REV., Mar. 24, 1997, at 36 (derisively commenting, regarding CDC studies, that gunshot wounds have "now been deconstructed as a 'disease'"). Firearms are responsible for roughly 36,000 annual fatalities and 100,000 annual serious injuries in the United States. See Polston & Weil, *supra* note 62, at 14 (citing figures showing more than 36,000 firearm deaths in the U.S. in 1994 and 99,000 non-fatal firearm-related injuries for the year beginning June 1, 1992). By any objective measure, gun violence appears to qualify as a major "public health" concern.

93. See *infra* notes 96-133 and accompanying text.

94. See *infra* notes 135-146 and accompanying text.

95. See *infra* notes 148-197 and accompanying text. A fourth type of study relevant to this Article examines the association between gun control laws and suicide rates. See generally David Lester, *Capital Punishment, Gun Control, and Personal Violence (Suicide and Homicide)*, 66 PSYCHOL. REP. 122 (1990) (finding stricter handgun laws modestly related to suicide rate); Colin Loftin et al., *Effects of Restrictive Licensing of Handguns on Homicide and Suicide in the District of Columbia*, 325 NEW ENG. J. MED. 1615 (1991) (finding suicide rate in District of Columbia decreased by 23% after adoption of strict handgun licensing laws, with no evidence of method substitution); John H. Sloan et al., *Firearm Regulations and Rates of Suicide: A Comparison of Two Metropolitan Areas*, 322 NEW ENG. J. MED. 369 (1990) (finding lax gun control laws in Seattle as compared to Vancouver were responsible for much higher suicide rate for persons aged 15-24). But see generally Charles L. Rich et al., *Guns and Suicide: Possible Effects of Some Specific Legislation*, 147 AM. J. PSYCHIATRY 342 (1990) (finding decrease in firearm suicides in Ontario and Toronto after passage of gun control legislation, but also finding increase in suicide by other methods, resulting in no decrease in overall suicide rate).

employed in the studies should consult them firsthand. No attempt is made here to evaluate the soundness of the methodologies.⁹⁶ While any individual statistical study might be subject to critique, reliance here is placed on the cumulative weight and consistent conclusions of the studies as a group.

(1) *Gun Ownership and Suicide*

Several studies have found an association between higher gun ownership rates and higher suicide rates:

Markush & Bartolucci, 1984. Robert Markush and Alfred Bartolucci studied whether regional suicide rates in the United States were associated with the household prevalence of firearms.⁹⁷ They used data from surveys conducted by the National Opinion Research Center ("NORC") to calculate the proportion of households containing guns by sex, race, age group, and census.⁹⁸ Reports from the *Vital Statistics of the United States* provided data used to calculate regional suicide rates.⁹⁹ Population estimates were obtained from U.S. census data.¹⁰⁰ Both weighted and unweighted linear regression analyses were performed on the data.¹⁰¹

The overall suicide rate for the four years studied was 12.6 suicides per 100,000 persons.¹⁰² The firearm suicide rates were highest in the Mountain region and lowest in the Mid-Atlantic region for both males and females.¹⁰³ Weighted analysis showed a significant relationship between gun prevalence and suicide for all groups except non-white females, although unweighted analysis showed no significant relationship between gun prevalence and suicide.¹⁰⁴ The suicide rate of white males was found to be significantly related to

96. The author has previously criticized over-reliance on statistics or studies purporting to establish cause and effect relationships between guns and gun violence. See Andrew J. McClurg, "*Lotts' More Guns and Other Fallacies Infecting the Gun Control Debate*," 11 J. FIREARMS & PUB. POL'Y 139, 150-67 (1999).

97. See generally Robert. E. Markush & Alfred A. Barolucci, *Firearms and Suicide in the United States*, 74 AM. J. PUB. HEALTH 123 (1984).

98. See *id.* at 123. NORC surveyed 1,500 households in the continental United States in 1973, 1974, 1976, and 1977. The data combined to create an overall sample size of 6017 households. See *id.* The NORC is affiliated with the University of Chicago. See *infra* note 249 and accompanying text.

99. See Markush & Barolucci, *supra* note 97, at 123. Regional suicide rates were calculated for the years 1973, 1974, 1976, and 1977. See *id.*

100. See *id.*

101. See *id.* The weighted data was obtained by multiplying each region's data by the relative size of each particular population segment by sex and race. See *id.*

102. See *id.*

103. See *id.*

104. See *id.* at 125.

handgun prevalence.¹⁰⁵

Lester & Clark, 1991. David Lester and Ronald Clarke compared suicide rates to gun ownership rates for the years between 1959 and 1984 to determine whether the two variables were related.¹⁰⁶ Estimates of gun ownership were derived from Gallup and NORC polling information.¹⁰⁷ For years in which no data was available, gun ownership was estimated based on the trend established by adjacent years for which data existed.¹⁰⁸ Information regarding the number of suicides was obtained from the *Vital Statistics of the United States*.¹⁰⁹ Data from the *Statistical Abstract of the United States* was used to estimate U.S. population during the relevant period.¹¹⁰ The suicide rate was calculated by dividing the number of suicide deaths by the overall population.¹¹¹ The study concluded that "the more handguns owned in the U.S.A., the higher the suicide rates using firearms and the lower the suicide rates using other methods."¹¹²

Killias, 1993. Martin Killias conducted an extensive international study to determine the correlation between gun ownership and suicide rates.¹¹³ Killias hypothesized that the availability of guns increases the likelihood of suicide and that having fewer guns would result in fewer suicides.¹¹⁴ He determined worldwide gun ownership rates through a 1989 international crime survey conducted through computer-assisted telephone interviews of 28,000 randomly selected people in fourteen countries.¹¹⁵ The percentages of homes with guns varied widely, from a low of 2% in the Netherlands to a high of 48% in the United States.¹¹⁶ Data for suicide rates for each country were collected from the World Health Organization.¹¹⁷ The gun ownership percentage of each country was charted with the suicide rate for the country to see if suicide rates tended to increase as gun ownership

105. *See id.*

106. *See generally* David Lester & Ronald V. Clarke, *Note on Suicide and Increased Availability of Handguns in the United States: The Influence of Firearm Ownership on Accidental Deaths*, 32 SOC. SCI. MED. 1311 (1991).

107. *See id.* at 1311.

108. *See id.*

109. *See id.*

110. *See id.*

111. *See id.*

112. *Id.* at 1312.

113. *See generally* Martin Killias, *International Correlations Between Gun Ownership and Rates of Homicide and Suicide*, 148 CANADIAN MED. ASS'N 1721 (1993).

114. *See id.* at 1722.

115. *See id.* The countries were Australia, Belgium, Canada, England, Wales, Finland, France, the Netherlands, Northern Ireland, Norway, Scotland, Spain, Switzerland, the United States, and West Germany. *See id.*

116. *See id.* at 1723.

117. *See id.*

percentages increased.¹¹⁸

Killias concluded that the number of suicides committed with a gun was related to the rate of household gun ownership.¹¹⁹ Moreover, Killias did not find evidence of method substitution.¹²⁰ In other words, residents of countries with low gun ownership rates did not use other suicide means more frequently to compensate for the absence of guns.¹²¹

Cummings et al., 1997. Peter Cummings and colleagues set out to determine whether handgun purchases correlate with an increased risk of suicide.¹²² Participants in this study were chosen from the membership of Group Health Cooperative of Puget Sound, a health maintenance organization in the state of Washington.¹²³ When a Group Health member died by suicide, five controls were located from the Group Health files that matched the victim in sex, age (within six years), and zip code of residence.¹²⁴ One control was then randomly selected from the group of five matched persons.¹²⁵ Cummings charted the handgun purchasing history of the suicide victims and controls using information obtained from the Washington Department of Licensing.¹²⁶ Under Washington law, all handgun purchases must be reported to that agency.¹²⁷

The study concluded that members of families with handguns faced a risk of suicide twice as high as the risk faced by persons of the same age, sex, and neighborhood belonging to families with no history of a handgun purchase.¹²⁸

Kaplan & Geling, 1998. Mark S. Kaplan and Olga Geling compared regional suicide and gun ownership patterns in the United States to determine if higher gun ownership rates are associated with

118. *See id.*

119. *See id.* at 1723-24.

120. *See id.* at 1724 ("Residents of the countries with low rates of gun ownership did not use means other than a gun more frequently to commit homicide and suicide to make up for the absence of guns."). *See infra* notes 200-240 and accompanying text for analysis of the theory of method substitution.

121. *See Killias, supra* note 113, at 1724.

122. *See generally* Peter Cummings et al., *The Association Between the Purchase of a Handgun and Homicide or Suicide*, 87 AM. J. PUB. HEALTH 974 (1997).

123. *See id.* at 974.

124. *See id.*

125. *See id.*

126. *See id.* at 975.

127. *See id.* Relevant handgun purchases were defined as: (1) family purchases (purchases by the subject or by any family member); (2) personal purchases (purchases by the study subject); and (3) family member purchases (purchases by any family member, but not the study subject). *See id.*

128. *See id.* at 977.

higher suicide rates.¹²⁹ Gun ownership estimates based on polling data derived from the NORC's General Social Surveys between 1989 and 1991 were broken down according to the nine geographic regions¹³⁰ defined by the U.S. Census Bureau.¹³¹ The percentage of households with firearms was found to vary widely among the regions, from a low of 38.6% in the New England Region to a high of 70% in the East South Central Region.¹³² Suicide data was obtained from the Division of Vital Statistics of the National Center for Health Statistics.¹³³ The study concluded that residing in a region with high gun prevalence increases the risk of firearm suicide death.¹³⁴

(2) *Guns in the Home and Suicide*

Kellermann et al., 1992. Arthur Kellermann and colleagues conducted the largest and most well-publicized study of the nexus between firearms and suicide, which concluded that keeping guns in the home is associated with an almost fivefold increase in the risk of suicide.¹³⁵ Kellermann studied all suicides occurring in Shelby County, Tennessee (Memphis area) and King County, Washington (Seattle area) during a thirty-two month period between 1987 and 1990.¹³⁶ Data was collected for each suicide from the police, the

129. See generally Kaplan & Geling, *supra* note 23.

130. See *id.* at 1229.

131. See *id.*

132. The nine regional divisions and percentage of households with firearms within each region are:

New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont): 38.6%.

Middle Atlantic (New Jersey, New York, Pennsylvania): 38.9%.

East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin): 54.6%.

West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota): 60.9%.

South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia): 58.8%.

East South Central (Kentucky, Alabama, Mississippi, Tennessee): 70.0%.

West South Central (Arkansas, Louisiana, Oklahoma, Texas): 67.87%.

Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming): 56.7%.

Pacific (Alaska, California, Hawaii, Oregon, Washington): 48.3%.

See *id.* at 1229, 1232.

133. See *id.* at 1228.

134. See *id.* at 1232. The study also found a stronger correlation between gun ownership and suicide than between gun ownership and homicide. See *id.* at 1231-32.

135. See Kellermann et al., *supra* note 80, at 467.

136. See *id.* These counties were selected because they are the most populous counties of their respective states and have contrasting racial and socioeconomic demographics. See *id.* "King County is predominantly white and enjoys a . . . high standard of living." *Id.* Shelby County has a "large black minority population and a substantial [number] of its citizens live below the poverty level." *Id.*

medical examiner, interviews with proxies for the victim concerning risk factors for suicide such as alcohol and drug use, victim's history of depression or mental illness, and gun ownership.¹³⁷ Interview results were compared to results obtained from a group of controls from the same neighborhood, who were matched with the victims by sex, race, and approximate age.¹³⁸ The result was 438 matched pairs of suicide victims and controls.¹³⁹

The study included these findings:

- Guns were kept in 65% of the suicide victims' homes compared to only 41% of the controls' homes.¹⁴⁰
- Handguns were kept in 49.5% of the victims' homes, but only 23.4% of the controls' homes.¹⁴¹ "Handguns were used in 72% of the suicides involving a firearm."¹⁴²
- In homes with guns, a firearm was the method of suicide in 86% of the cases.¹⁴³
- "In homes where [guns] were not [normally] kept, only 6 percent of [the victims committed suicide] with a firearm."¹⁴⁴

The most startling conclusion of the study was "that keeping one or more firearms was strongly associated with an increased risk of suicide in the home" by a ratio of 4.8:1.¹⁴⁵ Moreover, important to this Article, the study¹⁴⁶ showed that unsecured guns were associated

137. *See id.* at 468. The question most relevant to the study was worded as follows: "Half of all homes in America contain one or more firearms. Are guns of any kind kept in your home?" *See id.*

138. *See id.*

139. *See id.* at 469.

140. *See id.* at 470.

141. *See id.*

142. *Id.* at 469.

143. *See id.* at 470.

144. *Id.*

145. *See id.* The Kellermann study documented several suicide risk factors in addition to gun ownership. Depression or mental illness was present in 83.5% of the suicide victims, but only 6.4% of the controls. *See id.* Thirty-six percent of the suicide victims took prescribed psychotropic medication, while only 3.5% of the control group did so. *See id.* Alcohol abuse was reported in "substantially higher percentages" by the suicide proxies than by the controls. *See id.* at 469. Thirty-six percent of the suicide victims lived alone as compared to 18% of the controls. *See id.* The suicide victims were "far more likely" (27.8% vs. 8.5%) to have been arrested than the controls. *See id.* at 469-70. "Illicit-drug use was reported by 19.2 percent of the [suicide] proxies but only 3.1 percent of the . . . controls." *Id.* at 469.

Recognition that other risk factors play a role in suicide does not detract from the argument in favor of mandatory safe gun storage. To the contrary, it bolsters the argument. Precisely because so many members of the population are subject to suicide risk factors, access to firearms by unauthorized users should be restricted to eliminate the most lethal and convenient means for carrying out suicidal impulses.

146. As is the case with many of the epidemiological firearms studies, the Kellermann suicide study has been attacked by pro-gun partisans. Pro-gun scholar Don Kates, in

with a higher risk of suicide than guns kept in a locked place.¹⁴⁷

(3) *Guns and Adolescent Suicide*

Several studies, most of them conducted by David A. Brent, link firearms to an increased risk of suicide for adolescents:

Brent et al., 1988 (Brent et al., *Risk Factors*). Brent and colleagues compared adolescent suicide attempters to suicide completers to determine what differences exist between the two groups.¹⁴⁸ Brent interviewed family members of Pittsburgh adolescents who committed suicide between February 1984 and June 1986.¹⁴⁹ For a control group comparison, Brent also interviewed and psychologically assessed suicidal psychiatric inpatients who had either seriously considered suicide or had attempted suicide.¹⁵⁰

Brent hypothesized that firearm accessibility and availability might be one difference between the group of suicide attempters and suicide completers.¹⁵¹ To test that hypothesis, he obtained information concerning the number, type, and accessibility of firearms in the household at the time of each suicidal episode.¹⁵² Statistical analysis of the data supported his hypothesis. His research revealed that guns were the most common method for completing suicide, being used in 55.6% of successful attempts.¹⁵³ Teens who had guns at home were especially likely (70%) to use firearms as their method for suicide.¹⁵⁴ Firearms were much more likely to have been present in the homes of the suicide completers than in homes of the

criticizing the study, emphasized an alternative theory which may explain the association between guns in the home and firearm suicides—that gun ownership may be associated with personality traits related to suicide. See Kates et al., *supra* note 92, at 27. However, he failed to mention that the authors noted this same possibility. See Kellermann et al., *supra* note 80, at 471 (“[W]e cannot exclude the possibility that gun owners (and people who live in homes with guns) may be psychologically predisposed to commit suicide.”). Kates also suggested that the authors biased the study by excluding suicides which took place outside the home. See Kates et al., *supra* note 92, at 28. This criticism is unjustified inasmuch as the stated purpose of the study was to study the association between guns kept in homes and firearm suicides occurring in homes. Indeed, the title of the article is *Suicide in the Home in Relation to Gun Ownership*. See Kellermann et al., *supra* note 80, at 467.

147. See Kellerman et al., *supra* note 80, at 470.

148. See generally Brent et al., *Risk Factors*, *supra* note 81.

149. See *id.* at 581-82.

150. See *id.* at 582.

151. See *id.* at 581. Other differences between the suicide completers and the controls, such as mental illness and substance abuse, were also hypothesized to increase the risk of suicide. See *id.* Those portions of the study are not within the scope of this summary.

152. See *id.* at 583.

153. See *id.*

154. See *id.* at 585.

unsuccessful attempters (74.1% to 33.9%).¹⁵⁵ Brent concluded that his report was the first to "demonstrate[] that the availability of firearms is much greater in the homes of suicide completers than in those of a comparable group of at-risk youth."¹⁵⁶

Brent et al., 1991 (Brent et al., *Presence and Accessibility*). Seeking to replicate and extend their 1988 study,¹⁵⁷ Brent and fellow researchers conducted a more extensive case control study to explore whether the presence of guns in the home was related to adolescent suicide completion.¹⁵⁸ This study compared "a larger group of suicide completers with two more [closely] homogenous" groups: a group of adolescent inpatients who had attempted suicide and a group of adolescent inpatients with similar psychiatric disorders who had never attempted suicide.¹⁵⁹ Among the hypotheses sought to be established were: 1) that "guns will be found more frequently in the homes of suicide [completers] than in the homes of the control groups,"¹⁶⁰ and 2) that guns in the homes of suicide completers would be more easily accessible than guns in the homes of the control groups.¹⁶¹

Brent mailed letters requesting that families who had experienced an adolescent suicide (suicide of a person between thirteen and nineteen years old) between July 1986 and February 1988 participate in the study.¹⁶² He was able to complete interviews with forty-seven families.¹⁶³ The suicide completers were then matched for control purposes with both an adolescent inpatient who unsuccessfully attempted suicide, and a non-suicidal adolescent inpatient of similar age, gender, and county of origin.¹⁶⁴ Similar

155. *See id.*

156. *Id.* at 587. The study arrived at one conclusion potentially at odds with the thesis of this Article in suggesting, somewhat vaguely, that the manner in which the guns were stored did not affect the results. *See id.* at 585. Brent said that firearm availability appeared to be a more important factor than accessibility. *See id.* He concluded that "altering the method of storage is not likely to be as effective as simply removing all firearms from the home." *Id.* at 587. He reached a similar conclusion in a second study published in 1991. *See infra* notes 157-177 and accompanying text for a discussion of the 1991 study and Brent's conclusions regarding the efficacy of safe storage.

157. *See generally* Brent et al., *Risk Factors*, *supra* note 81. *See supra* notes 148-156 and accompanying text.

158. *See generally* David A. Brent et al., *The Presence and Accessibility of Firearms in the Homes of Adolescent Suicides: A Case-Control Study*, 266 JAMA 2989 (1991) [hereinafter Brent et al., *Presence and Accessibility*].

159. *Id.* at 2990. Two control groups were selected, rather than one, to enhance the reliability of the findings. *See id.*

160. *See id.*

161. *See id.*

162. *See id.*

163. *See id.*

164. *See id.* The suicide attempters and non-suicidal teens were all patients at the Western Psychiatric Institute and Clinic, a Pennsylvania state hospital that treats patients

interviews were conducted with the controls and their families.¹⁶⁵ Questions included the number, type, and presence of guns in the home.¹⁶⁶

Statistical analysis revealed alarming results.¹⁶⁷ None of the unsuccessful suicide attempters used guns in their attempts, but 69% of suicide victims used firearms to commit suicide.¹⁶⁸ Also, the majority of suicide victims who had guns in their homes died of firearm suicides (29 of 34), while firearm suicides were infrequent in homes of suicide victims without guns (1 of 13).¹⁶⁹ Guns were present in the homes of 72.3% of the suicide completers; in contrast, they were present in the homes of only 37% of the suicide attempters and 38.3% of non-suicidal patients.¹⁷⁰

Potentially problematic for the premise of this Article, Brent found, as he did in the 1988 study,¹⁷¹ that firearm storage methods did not appear to make any difference.¹⁷² Specifically, he concluded that "[g]ood gun safety habits are not likely to be protective against suicide . . . in the home."¹⁷³ He recommended that all guns be removed from the homes of adolescents at risk for suicide.¹⁷⁴ There can be no doubt he is correct. Removing guns is the preferred method of risk reduction with respect to firearms tragedy of all kinds. A nonexistent firearm cannot cause harm, whereas the presence of any gun, even a secured gun, always carries some risk.

Beyond that, there are several reasons to discount Brent's conclusion regarding the efficacy of safe storage. First, the sample upon which this finding was based was extremely small. Three of five suicide completers in homes where guns were stored locked killed themselves with one of those guns.¹⁷⁵ No reliable generalized conclusion about the safety of keeping guns locked away can be drawn from three incidents.

Second, and more importantly, the study contains no information about how the guns were kept secured or how the adolescent gained access to them. It is a fundamental premise of this Article that a firearm stored in a manner in which it remains accessible to

from a wide geographical region and from the full socioeconomic spectrum. *See id.*

165. *See id.* at 2991.

166. *See id.*

167. *See id.* at 2992.

168. *See id.*

169. *See id.*

170. *See id.*

171. *See supra* note 156 and accompanying text.

172. *See* Brent et al., *Presence and Accessibility*, *supra* note 158, at 2992-93.

173. *Id.* at 2995.

174. *See id.*

175. *See id.*

unauthorized users is, by definition, not safely stored. For example, a gun stored in a locked closet, cabinet or drawer that can be easily broken into is not safely stored. The same can be said of guns stored in adequately secure containers if the key or combination to the container is kept in a place known to adolescents in the household.

Third, tremendous advances have been made in recent years in firearms storage technology. A wide variety of effective and feasible storage means are now commercially available.¹⁷⁶ Finally, Arthur Kellermann's later and much larger study in 1992 reached a contrary conclusion, finding that unsecured guns were associated with a higher risk of suicide than guns kept in a locked place.¹⁷⁷ Brent would no doubt agree that, short of removing guns from households, securely locking them up is the next best alternative.

Brent et al., 1993 (Brent, et al., *Firearms*). Brent next addressed the connection between the presence of guns in the home and adolescent suicide in a 1993 study, *Firearms and Adolescent Suicide: A Community Case-Control Study*.¹⁷⁸ This study matched sixty-seven suicide victims with living controls by geographic cluster sampling of communities with similar median income, population density, racial composition, and age distribution.¹⁷⁹ Members of each suicide victim's family were interviewed and asked to complete psychological

176. In addition to traditional gun safes, manufacturers are developing a variety of new safe storage boxes and trigger locks designed to accommodate both safety needs and the desire of gun owners to have guns readily available for self-defense. The Saf T Lok "trigger lock replaces the grip of a handgun and" uses a "quick click" combination designed to release "the lock within three seconds, even in [total] darkness." See Carl Stewart, *Keep 'Em Safe: It's Smart Business (Protecting Gun Owners)*, SHOOTING INDUSTRY, Nov. 1, 1997, available in 1997 WL 13741933. The Speed Release Gun Lock is an electronic trigger locking device powered by a nine volt battery featuring a programmable four-digit illuminated keypad. See *id.* The manufacturer of the Sesamee line of combination gun locks boasts that its locks "can be opened quickly, even in low-light conditions." See *Id.* (quoting Maura Griffin, representative of CCL Security Products). The ultimate form of safe storage lies in personalized gun technology, which will disable guns to all but the authorized user. In April 2000, Smith & Wesson, the Nation's largest gun manufacturer by market share, entered into a settlement agreement with many of the governmental entities that sued the gun industry. Under the agreement, Smith & Wesson shall, within three years, equip all new models of firearms with personalized technology. See generally, Smith & Wesson, *Clarification on Settlement Document Agreement* (March 17, 2000) <<http://www.smith-wesson.com/misc/agreement.html>>.

177. See *supra* note 147 and accompanying text. The Kellermann study was almost 10 times larger than the Brent study. Kellermann's study included 438 matched pairs of suicide victims and controls. See Kellermann et al., *supra* note 80, at 469. Brent's study involved only 47 suicide victims. See Brent et al., *Presence and Accessibility*, *supra* note 158, at 2990.

178. See Brent et al., *Firearms*, *supra* note 15, at 1066.

179. See *id.*

assessment ratings of the suicide victim.¹⁸⁰ Informants for the matched controls completed the same interviews and assessment ratings.¹⁸¹ During the interviews, individuals were asked questions about the number and types of guns present in their households and whether they were stored loaded or unloaded.¹⁸²

Statistical analysis of the data once again showed that the presence of guns in the home is strongly associated with adolescent suicide. Suicide victims were more than three times as likely as the controls to have had access to any gun and almost five times as likely to have had access to a handgun.¹⁸³ Seventy percent of suicide victims killed themselves with guns.¹⁸⁴ Ninety-three percent of victims who committed suicide with a gun had a gun in the home, while only 31.6% of victims using other methods had a gun at home.¹⁸⁵

Perhaps the most significant conclusion of the study was that firearms may be the primary risk factor for adolescents not suffering from any type of psychological disorder. Psychiatric disorders are the dominant risk factor for adolescent suicide.¹⁸⁶ Brent's two earlier studies matched suicide victims with living controls suffering from mental disorders, whereas the 1993 study matched controls without regard to psychopathological condition.¹⁸⁷ While the previous studies established that firearms enhance the suicide risk for adolescents with psychiatric disorders,¹⁸⁸ the 1993 study added the important finding that a handgun or loaded gun in the home may be the primary suicide risk factor for teenagers not suffering from mental or emotional disorders.¹⁸⁹ Brent went so far as to state that for the 5 to 10% of adolescent suicide victims who do not suffer from a psychiatric illness, "prevention of suicide may rest almost *entirely* on the restriction of availability and accessibility of firearms."¹⁹⁰

Brent et al. 1993 (Brent et al., *Psychopathology*). Brent published the results of a separate study the same year reinforcing this conclusion.¹⁹¹ Comparing seven suicide victims with no apparent psychiatric disorder to sixty suicide victims with a definite or probable

180. *See id.* at 1067.

181. *See id.*

182. *See id.*

183. *See id.* at 1068.

184. *See id.*

185. *See id.*

186. *See supra* note 88 and accompanying text.

187. *See* Brent et al., *Firearms*, *supra* note 15, at 1067.

188. *See supra* notes 148-177 and accompanying text.

189. *See* Brent et al., *Firearms*, *supra* note 15, at 1070.

190. *Id.*

191. *See generally* David A. Brent et al., *Suicide in Adolescents with No Apparent Psychopathology*, 32 J. AM. ACAD. CHILD ADOLESCENT PSYCHIATRY 494 (1993) [hereinafter Brent et al., *Psychopathology*].

disorder and thirty-eight community controls with no disorder,¹⁹² Brent and his colleagues concluded that suicide victims with no disorders were much more likely to have a loaded gun in the home than suicide victims with a disorder.¹⁹³

Resnick et al., 1997. Michael D. Resnick and fellow researchers attempted to identify risk and protective factors facing teens in four areas of health and morbidity: emotional health, violence, substance use, and sexuality.¹⁹⁴ More than 12,000 adolescents in grades seven through twelve were interviewed nationwide.¹⁹⁵ One of the study's findings was that easy access to guns at home is associated with suicidal behavior and thought for older adolescents.¹⁹⁶ Twenty-four percent of the students interviewed reported that guns were "easily accessible" at home.¹⁹⁷

(4) *Summary*

This section has summarized eleven different studies linking firearms and increased suicide rates. Although the pro-gun forces have been quick to attack the public health research regarding guns,¹⁹⁸ they cannot point to any evidence refuting the conclusion that firearms in the home increase the risk of suicide.¹⁹⁹ However, even without the strong evidentiary support provided by the multiple public health studies, we could draw the same conclusion the old-fashioned way. Simple logic informs us that an easily-accessible handheld instrumentality that can instantly end life is a potent risk to persons with suicidal ideation.

C. The Myth of "Method Substitution"

The overall suicide rate in the United States ranks lower than the suicide rate in some other countries with stricter gun laws.²⁰⁰ From

192. See *id.* at 494-95.

193. See *id.* at 498.

194. See Michael D. Resnick et al., *supra* note 5, at 823.

195. See *id.* at 824. The interviews were conducted in the subjects' homes between April and December 1995. See *id.*

196. See *id.* at 827-28.

197. See *id.* at 828.

198. See *supra* notes 92, 146 and accompanying text.

199. See Fox et al., *supra* note 14, at 284 (stating that all studies examining the relationship between guns in the home and attempted suicide have concluded that keeping guns in the home increases risk of suicide among occupants).

200. See, e.g., Polsby, *supra* note 92, at 36 (discussing an international comparison in suicide rates and characterizing the argument that fewer guns would lead to fewer suicides as an "uncommonly silly inference"; suggesting that a preference for handguns to commit suicide is simply a preference for a "low-tech, quick and . . . painless way out."); David C. Stolinsky, *Suicide, Homicide and Gun Control Laws: Are They Related? International Suicide and Homicide Rates and Gun Control Policies*, GUNS & AMMO, Dec. 1984, at 30

this, gun advocates assert that, despite the fact that the United States has by far the highest firearms suicide rate in the world,²⁰¹ firearms availability and gun laws have little or no connection to the suicide rate.²⁰² They assert that if guns were not available for use in suicide, attempters would simply substitute a different method.²⁰³

It is true that the overall suicide rate in this country falls only about midway on the list of suicide rates among industrialized countries.²⁰⁴ Countries such as Hungary, Denmark, Finland, Switzerland, and Japan have higher overall suicide rates than the United States, while countries such as Ireland, Italy, Spain, and Greece have lower rates.²⁰⁵ It is also true that some countries with higher suicide rates than the United States have much lower gun density.

However, international comparisons are of questionable validity in this area due to the many cultural differences between nations.²⁰⁶ World suicide rates have remained remarkably stable over time, suggesting that cultural factors best explain the differences in national suicide rates.²⁰⁷ Gun proponents are fond of drawing comparisons to

(asserting that because U.S. overall suicide rates lie in the middle-range worldwide, "[c]learly there is no relation between suicide rates and gun-control laws").

201. See Krug et al., *supra* note 17, at 232 (study showing that the U.S. firearm suicide rate for youths is almost 11 times higher than the rest of the industrialized world); Ed Magnuson, *supra* note 75, at 61 (stating that U.S. leads the world in gun use for self-inflicted death).

202. See Polsby, *supra* note 92, at 36; Stolinsky, *supra* note 200, at 30.

203. See DAVID B. KOPEL, *THE SAMURAI, THE MOUNTIE, AND THE COWBOY: SHOULD AMERICA ADOPT THE GUN CONTROLS OF OTHER DEMOCRACIES?* 157 (1992) (suggesting that gun control makes no difference in suicide rate because of method substitution); Polsby, *supra* note 92, at 36.

204. See Magnuson, *supra* note 201, at 61 (stating U.S. overall suicide rate falls midway on World Health Organization's list of suicide rates for 33 industrialized countries).

205. See *id.*

206. Not surprisingly, gun proponents reject international comparisons when they are used to bolster the argument for gun control. The U.S. firearm homicide rate is substantially higher than the rate in other industrialized countries. In 1992, 13,200 handgun deaths occurred in the U.S. as compared to only 128 in Canada, 97 in Switzerland, 60 in Japan, 36 in Sweden, and 33 in Great Britain. See David D. Porter, *Guns; Americans Have a Love-Hate Relationship with Firearms*, ORLANDO SENTINEL, Apr. 10, 1994, at G1. On a per capita basis, these figures translate to 51 handgun deaths in the United States per one million residents, 14 per million residents in Switzerland, 4 per million residents in Canada and Sweden, and less than 1 per million residents in Great Britain and Japan. See *id.* When gun control advocates cite these figures, gun proponents dismiss them as attributable to cultural differences. See Polsby, *supra* note 92, at 35 (suggesting differences in firearms homicide rates between U.S., England, and Wales are attributable to cultural and population differences).

207. See A.J.F.M. Kerkhof, *Suicide and Attempted Suicide*, WORLD HEALTH, Mar.-Apr. 1994, at 19 (suggesting strong cultural forces explain the "remarkable stability" in the ranking order of suicide rates worldwide).

Japan, a virtually gun-free society with a significantly higher suicide rate than the United States, in arguing that firearms availability does not play a role in suicide rates.²⁰⁸ But unlike the United States, where suicide is considered an anti-religious and cowardly act, Japanese culture has traditionally glorified suicides committed in the name of honor.²⁰⁹

However, even if there were some merit to the "method substitution" argument based on worldwide comparison of suicide rates, the argument falls apart when one isolates adolescent suicides. While the United States falls only midway on the worldwide list for overall suicide rates, our adolescent suicide rate leads the world. A study of suicides in twenty-six industrialized countries during a one-year period showed that 54% of the total worldwide suicides for children under age fifteen occurred in the United States.²¹⁰ The suicide rate for children under fifteen in the United States was two times higher than the rate for the other twenty-five countries combined.²¹¹

Moreover, no substantial evidence supports the theory of method substitution. The primary study finding evidence of method substitution examined suicide rates in Toronto and Ontario before and after the implementation of strict gun control legislation in 1978.²¹² Comparing suicide rates in the two provinces for the five-year period preceding the gun control legislation and the five-year period following its enactment, the study found no significant change in the overall suicide rate.²¹³

Looking at the method of suicide employed by men in Toronto, the study found a substantial decrease in the mean proportion of suicides by firearms, but found that this decrease was offset by jumping suicides.²¹⁴ However, the samples were small enough to call

208. See KOPEL, *supra* note 203, at 43 (asserting "Japanese experience does not seem to support the hypothesis that fewer guns mean fewer suicides. Japanese gun suicide rate is one-fiftieth of . . . [that in the U.S., but the] . . . overall suicide rate is nearly twice as high as [that in the U.S.]").

209. See KLAGSBRUN, *supra* note 40, at 147-48.

210. See CENTERS FOR DISEASE CONTROL AND PREVENTION, 26 INDUSTRIALIZED COUNTRIES, *supra* note 13, at 102.

211. See *id.*

212. See Rich et al., *supra* note 95, at 342.

213. See *id.* at 343.

214. See *id.* The study also purported to examine the effect on suicide rates in San Diego of a California statute that prohibits the possession of firearms by mental patients. See *id.* at 342. The study stated that the San Diego data also provides evidence of "method substitution." See *id.* at 344. However, strangely, the study offered literally no textual discussion explaining or supporting this conclusion. There is little reason to credit such a conclusion. It is unlikely the California statute has any significant effect on the ability of mentally ill persons to acquire firearms. Federal law has long prohibited the

into question any general conclusions drawn from the study. For example, shooting suicides dropped in Toronto from twenty-two in the year preceding the legislation (1977) to sixteen in the year following the legislation (1979), while jumping deaths rose from fifteen to eighteen for the same years.²¹⁵ The authors also acknowledged several limitations of the study,²¹⁶ and noted that the proportion of firearms suicide in Toronto was considerably lower than the rate of firearms suicide in the United States even before the gun control laws were enacted.²¹⁷

A study of the effect of gun control restrictions in the District of Columbia reached an opposite conclusion regarding method substitution. Charles Loftin and colleagues studied the impact of a strict gun control law instituted in Washington, D.C. in 1976 to determine whether it affected homicide and suicide rates.²¹⁸ The District of Columbia law essentially banned the possession of handguns not owned at the time the law took effect, imposed strict registration requirements on shotguns and rifles, and required that all firearms be kept unloaded and disassembled or locked up except when being used for lawful recreational purposes or when kept in a place of business.²¹⁹

The study compared suicides in the District of Columbia and the surrounding suburban areas of Maryland and Virginia for several years before and after implementation of the handgun ban.²²⁰ It found that suicides by firearms abruptly declined in the District of

possession of firearms by any person who has been "adjudicated as a mental defective or who has been committed to a mental institution." See 18 U.S.C. § 922(g)(4) (1976). However, until passage of the Brady Bill in 1993, which requires background checks of handgun purchasers, mental incompetents and other prohibited purchasers could easily purchase firearms over the counter simply by lying about their status on the federal firearms transaction form. See Brady Handgun Violence Prevention Act, 18 U.S.C.A. §§ 922(s)-(t) (West 1994). Even after passage of the Brady Bill requiring background checks, there is no general database for checking whether a person has received psychiatric treatment. See Wesley Lasseigne, "Brady" or Not?, 10 J. FIREARMS & PUB. POL'Y 77, 79 (1998) (stating that of eight categories of prohibited purchasers under federal law, background checks focus mostly on convicted felons).

215. See Rich et al., *supra* note 95, at 343. The authors excluded 1978, the year the legislation took effect, because guns were being collected throughout the year. See *id.* at 342-43.

216. See *id.* at 344-46.

217. See *id.* at 345.

218. See Loftin et al., *supra* note 95, at 1615.

219. See *id.* "The law restrict[ed] the possession of firearms to persons . . . [holding a] registration certificate." *Id.* Persons owning handguns at the time the law took effect were granted 60 days to re-register them. See *id.* After that period, handguns became "unregisterable," effectively making them illegal. See *id.*

220. See *id.* The study included suicides committed in the District of Columbia, suburban Maryland, and Virginia from 1968 through 1987. See *id.*

Columbia by 23% after the handgun ban.²²¹ The adjacent areas in Maryland and Virginia, which were not subject to the handgun ban, did not show statistically significant declines.²²² Contrary to the findings of Rich's Canadian study, the Loftin U.S. study found "no compensating increases in . . . suicides by methods other than guns."²²³

Similarly, Martin Killias found no evidence of method substitution in his worldwide analysis of gun ownership rates and suicide.²²⁴ He concluded that residents of countries with low rates of gun ownership did not use other means more frequently to commit suicide to compensate for an absence of guns.²²⁵

Assuming *arguendo* that method substitution has validity, society and potential victims of suicide would still benefit by having fewer guns available. Because guns are the most lethal method for attempting suicide,²²⁶ resort to other methods would result in fewer lives lost.²²⁷ Loftin suggested that "weapon-choice theory"²²⁸ may best explain why no compensating increases in suicides by other methods occurred in the District of Columbia following the handgun ban.²²⁹ The weapons-choice theory holds that where the resolve to kill is weak or short-lived, death rates will be influenced by the availability of particular weapons.²³⁰ Because firearms are more likely to cause death than other instrumentalities,²³¹ reducing access to firearms will result in lower death rates, even if the number of suicide attempts remains the same.²³² While "[s]ome people select guns because they are determined to kill [or die] . . . others do so only because a gun is readily available."²³³

This appears to true with regard to many adolescent suicides. In

221. See *id.* at 1617.

222. See *id.*

223. *Id.* at 1619.

224. See Killias, *supra* note 113, at 1724. See *supra* notes 113-121 and accompanying text for discussion of this study.

225. See Killias, *supra* note 113, at 1724.

226. See *supra* notes 65-80 and accompanying text.

227. See Joe Manning, *Firearms Used in Most Suicides; 57% of Cases Involved Gun in 1990-94, Study Says*, MILWAUKEE J. SENTINEL, May 18, 1996, at 12 (quoting Wisconsin epidemiologist Patrick Remington: "Someone could argue that if a person wants to kill himself, he will pick one way or the other. But if you take a firearm from someone who is suicidal, he will pick a less likely lethal means.").

228. This theory was developed by Franklin Zimring. See Franklin Zimring, *Is Gun Control Likely to Reduce Violent Killings?*, 35 U. CHI. L. REV. 721, 721-35 (1968).

229. See Loftin et al., *supra* note 95, at 1619.

230. See *id.*

231. See *supra* notes 65-80 for a discussion of the lethality of firearms as a method for attempting suicide.

232. See Loftin et al., *supra* note 95, at 1619.

233. *Id.*

one of his several studies in the area, David Brent asserted that "method substitution may be less likely to occur in adolescents and young adults" due to the prominent role "impulsive[ness] and substance abuse play in youthful suicide."²³⁴ In other words, firearms access probably plays a greater role in lethal suicide attempts among youths than in older adults who are more committed to the idea of suicide.²³⁵

Thus, Rich's assertion in his Toronto/Ontario study that "people who are determinedly suicidal eventually find some other way to commit suicide,"²³⁶ even if true, has less application to adolescent suicide attempters, most of whom, the evidence shows, do not really wish to die.²³⁷ Their lack of resolve may be reflected in their choice of non-lethal methods.²³⁸ However, adolescents' knowledge of the lethality of different methods is often inaccurate.²³⁹ Specifically, the lethality of firearms is sometimes underestimated.²⁴⁰

In sum, the method substitution argument fails on several grounds. Conclusions drawn from worldwide comparisons of suicide rates are of questionable validity due to the many cultural differences between nations. In any event, a method substitution argument based on worldwide comparisons disintegrates when one focuses on adolescent suicides because the United States has the highest adolescent suicide rate in the world. Moreover, no substantial evidence supports the theory of method substitution. Finally, even assuming the argument has merit, resort to other methods would still result in fewer lives lost because other suicide methods are not as lethal as firearms.

234. Brent et al., *Presence and Accessibility*, *supra* note 158, at 2994. See also Sloan et al., *supra* note 95, at 369. Sloan and colleagues compared suicide rates in the Seattle area, where gun control laws are lax, with rates in Vancouver, where gun control laws are strict. See *id.* at 369-70. Guns were much more prevalent in the Seattle area. See *id.* at 370. The rate of firearm suicide in Seattle was significantly higher than in Vancouver, a difference the authors attributed to a 5.7 times higher rate of handgun suicide. See *id.* However, this difference was offset by a 1.5 times higher rate of suicide by other methods in Vancouver. See *id.* This suggests a method substitution effect with respect to the overall suicide rates. However, the authors found that Seattle residents in the 15 to 24 age-group committed suicide at a rate of 1.38 times higher than individuals of the same age-group residing in Vancouver. See *id.* at 371. The authors concluded this difference was due to an almost 10 times higher rate of handgun suicides. See *id.*

235. See Brent et al., *Presence and Accessibility*, *supra* note 158, at 2994.

236. Rich et al., *supra* note 95, at 344.

237. See *supra* notes 72-73 and accompanying text.

238. See *supra* notes 76-80 and accompanying text for information regarding suicide methods chosen by adolescents.

239. See Garland & Zigler, *supra* note 53, at 171 (discussing studies showing adolescents' knowledge of lethality often inaccurate).

240. See STONE, *supra* note 22, at 153 (discussing study in which non-experts underestimated lethality of gunshot wounds as a method of suicide).

III. The Public Health Case That Optional Gun Safety Responsibility Does Not Work

A. Non-Controversial Gun Control?—Even the NRA Agrees Guns Must Be Safely Stored.

The necessity that guns be safely stored may be the only issue on which pro and anti-gun forces agree.²⁴¹ On its website, the NRA admonishes gun owners to "[s]tore guns so that they are inaccessible to children and other unauthorized users,"²⁴² acknowledging that "[g]un shops sell a wide variety of safes, cases, and other security devices" for accomplishing this goal.²⁴³ A popular gun magazine declaims that "[a]ll gun owners have the responsibility of keeping their firearms out of unauthorized hands."²⁴⁴ A writer for the 1999 *Colt Firearms Buyer's Guide* "recommends storing . . . firearms in a locked cabinet or approved gun safe."²⁴⁵ Of direct relevance to this Article, an NRA spokesperson wrote that restricting access to firearms by suicidal teenagers "is not controversial."²⁴⁶

The disagreement begins when one considers the means for enforcing this universally agreed-upon responsibility. Pro-gun forces want to make personal responsibility for safely storing firearms optional. They oppose mandatory safe storage laws.²⁴⁷ The NRA

241. See Andrew J. McClurg, *The Rhetoric of Gun Control*, 42 AM. U. L. REV. 53, 110-12 (1992) (offering opinion that there appears to be little room for middle-ground in the gun control debate and explanation for same). A relevant example of the inability of partisans in the gun debate to see eye-to-eye exists in the commentary on a study that compared firearm suicide rates in Seattle, Washington, Vancouver, and British Columbia. See Sloan et al., *supra* note 95, at 369. The study concluded that Seattle's significantly higher suicide rate for persons aged 15-24 was due to an almost 10 times higher rate of suicide involving handguns in Seattle. See *id.* In separate letters to the *Journal of the American Medical Association*, a spokesman for the NRA condemned the study as "incompetently conducted," see Letter from Paul H. Blackman to the *Journal of the American Medical Association*, in *Letters, Firearm Access and Suicide*, 267 JAMA 3026, 3026 (1992), while the most prominent researcher in the field of adolescent firearm suicides described the same study as "elegant," see Letter from David A. Brent to the *Journal of the American Medical Association*, in *Letters, Firearm Access and Suicide*, 267 JAMA 3026, 3026 (1992).

242. A *Parent's Guide to Gun Safety*, Nat'l Rifle Ass'n Headquarters <<http://www.nrahq.org/safety/education/guide.shtml#parent>>.

243. *Id.*

244. Bill O'Brien, *Securing Your Handgun*, GUNS & AMMO: HANDGUNS FOR HOME DEFENSE, 1994, at 41.

245. Frank James, *All About Gun Safety*, in 1999 COLT FIREARMS BUYER'S GUIDE 72, 72 (1999).

246. See Blackman, *supra* note 241, at 3026.

247. See *Fables, Myths & Other Tall Tales About Gun Laws, Crime and Constitutional Rights: Fable VI*, Nat'l Rifle Ass'n Headquarters <<http://www.nra.org/research/19990728-BillofRightCivilRights-002.html#FABLEVI>> (stating NRA opposes safe

states that "[e]veryone knows that firearms must be stored safely, but most Americans feel that it is not the government's business to dictate how people store things in their homes."²⁴⁸

However, reliable survey data shows the NRA's appraisal of public attitudes regarding the responsibility for safely storing guns is inaccurate. The public strongly favors laws mandating safe storage and other measures designed to keep guns out of the hands of unauthorized users. In May 1999, the National Opinion Research Center of the University of Chicago, working in collaboration with the Center for Gun Policy and Research of Johns Hopkins University, issued a report setting forth the findings of its 1998 National Gun Policy Survey.²⁴⁹ This comprehensive survey showed that the American public, by wide margins, favors legislative action to keep guns out of the hands of unauthorized users (which includes suicidal adolescents). Included in the survey findings:

- 73.7% of survey participants support laws requiring that guns be stored in a locked box or cabinet.²⁵⁰

storage laws); David Kopel, *The Hidden Agenda Behind Gun Storage Laws*, Nat'l Rifle Ass'n Headquarters, <<http://www.nraila.org/research/19991005-InternationalGunControl-002.shtml>> (stating: "Home safety is the responsibility of the family, not the state.").

248. *Fact Sheet: Mandatory Storage/Trigger Lock Legislation*, Nat'l Rifle Ass'n Headquarters, <<http://www.nraila.org/research/19990729-Safety-0001.html>>.

249. See TOM W. SMITH, NAT'L OPINION RES. CENTER, *1998 National Gun Policy Survey of the National Opinion Research Center: Research Findings: May 1999 Report*, 1999 NAT'L OPINION RES. CENTER (1999) (on file with author) [hereinafter *NORC Survey*]. The May 1999 report combines data from several *NORC* surveys: (1) the 1998 *National Gun Policy Survey*; (2) the 1997-98 *National Gun Policy Survey*; (3) the 1996 *National Gun Policy Survey*; and (4) the 1972-98 *General Social Surveys*. See *id.* at 2. Supplemental data from other state and national polls is also included. See *id.* All survey results discussed in the text of this Article come from the 1998 *National Gun Policy Survey*. Data for the 1998 survey was collected between September 10, 1998 and November 15, 1998. See *id.* The *NORC* gun policy surveys are national, random telephone surveys of adults. Analysis of the data used a post-stratification weight adjusting for age, gender, race, education, and region according to U.S. Census figures. See *id.* The 1998 survey includes 1200 adults and has a margin of error of 3%. See NAT'L OPINION RES. CENTER, *Gun Owners, General Public Wants Stronger Gun Laws*, *National Opinion Research Center Survey Shows*, NEWS at 3 (May 6, 1999) (Press Release is on file with author). *NORC* has conducted national surveys in public interest areas for more than 55 years. See *id.* at 32 tbl.2.

250. *NORC Survey*, *supra* note 249, at 32 tbl.2. Gun proponents have attacked gun policy surveys, which consistently show widespread support for stricter gun regulation, for framing questions in a way that distorts the results in favor of gun control. See Dave Kopel, *Polls: Anti-Gun Propaganda*, Nat'l Rifle Ass'n Headquarters <<http://www.nraila.org/research/19990716-medialress-001.html>>; Gary Kleck, *Reasons for Skepticism on Results from a New Poll on: The Incidence of Gun Violence Among Young People*, 4 PUB. PERSP. 3 (1993) (raising questions about validity of youth firearm survey conducted for the Harvard School of Public Health). Survey bias is a legitimate concern. However, the questions in the *NORC Survey* regarding safe firearms storage were neutrally worded. Survey participants were asked the following questions:

- 76.8% support laws requiring guns be stored with trigger locks.²⁵¹
- 78.4% support laws requiring that guns be stored unloaded.²⁵²
- 79.6% support a federal law making gun owners liable for the negligent storage of a firearm if a child gains access to the weapon and uses it to cause harm.²⁵³
- Depending on the wording of the question, 69.8% to 74.5% of participants support laws requiring all new handguns be equipped with "personalized" technology that would allow the guns to be discharged only by authorized users.²⁵⁴

B. Millions of Unsecured Guns—The Storage Studies

Optional personal responsibility for safe storage is bad policy. If

Do you favor or oppose laws requiring:

That all guns be stored in a locked box or cabinet?

That all guns be stored unloaded?

That all guns be kept with a trigger lock? A trigger lock is an attachment that prevents a gun from being fired until the device around the trigger is unlocked and removed.

See *NORC Survey*, *supra* note 249, at 33.

251. See *id.* at 32 tbl.2. See *supra* note 250 for wording of question.

252. See *id.*

253. See *id.* The question was worded as follows:

Some states have child access prevention laws that subject adults to criminal or civil penalties if they fail to store their firearm to prevent access by children who then use the firearm and death or injury results. Would you strongly favor, favor, oppose, or strongly oppose a similar national child access prevention law?

Id. at 33.

254. See *id.* at 32 tbl.2. The first percentage (69.8%) was obtained in response to the following question:

Engineers are now designing handguns equipped with devices which can recognize the owner of a gun and not fire for anyone else. For example, these personalized guns may have a mechanism that prevents the gun from firing unless it comes in contact with a special ring that the shooter must wear. The technology is intended to protect a gun owner if an attacker tries to take his gun away and to make the gun less useful to criminals if it is stolen. Personalized guns are also designed to reduce the risk of a child or teenager shooting themselves or someone else. But personalized guns will cost more than other guns and the chances that the gun will not fire when you want it to may be increased slightly. If a new law were to require all handguns to be personalized, how strongly would you favor or oppose it? Would you strongly favor, favor, oppose, or strongly oppose?

Id. at 34. The second percentage (74.5%) was obtained by rephrasing the question as follows:

Engineers are now designing handguns equipped with devices which can recognize the owner of a gun and not fire for anyone else. If a new law were to require all new handguns to be personalized, how strongly would you favor or oppose it? Please tell me if you would strongly favor, favor, oppose or strongly oppose it.

Id.

all gun owners were responsible 100% of the time, mandatory safe storage laws backed by sanctions²⁵⁵ would be unnecessary. However, the evidence is quite clear that large numbers of gun owners are not responsible and that even responsible gun owners are not responsible all of the time. No fewer than ten studies show that millions of guns are negligently stored in millions of American homes.

Weil & Hemenway, 1992. Douglas Weil and David Hemenway set out to identify factors associated with the household storage of loaded firearms.²⁵⁶ In December 1989, a random national telephone survey questioned a sample of 605 U.S. citizens.²⁵⁷ Respondents were asked if they owned a gun. If they answered affirmatively, further questions were administered.²⁵⁸ Questions were asked to develop a statistical base to analyze four key variables regarding gun ownership: (1) type of gun or guns owned; (2) reason for owning a gun; (3) presence of children in the home; and (4) type of firearm training received, if any.²⁵⁹

Persons owning handguns were categorized separately from persons owning no handguns.²⁶⁰ Those who purchased a gun for protection were grouped apart from persons who owned guns for all other reasons.²⁶¹ People who lived with children were distinguished from those who had no children in the home.²⁶² Finally, respondents who had formal firearms training were contrasted with persons who lacked training.²⁶³

Additionally, gun owners were asked: "Do you sometimes keep your gun loaded, always keep it loaded, or never keep it loaded?"²⁶⁴ Persons who never kept guns loaded were distinguished from those who always or sometimes kept guns loaded.²⁶⁵ Multivariate logistic

255. Existing safe storage laws in the form of state Child Access Prevention laws impose criminal penalties for the negligent storage of a firearm if a child acquires the firearm and uses it to cause harm. *See infra* note 364 (containing citations to state CAP statutes); *see also* McClurg, *Child Access Prevention Laws*, *supra* note 8, at 63 (analyzing penalty provisions of each state statute and proposed federal CAP law). The author has previously argued that CAP laws should also contain provisions for civil tort liability. *See id.* at 71-73. In the absence of a specific civil tort liability provision, violations of safe storage laws could constitute negligence per se. *See id.* at 71-74.

256. *See generally* Douglas G. Weil & David Hemenway, *Loaded Guns in the Home: Analysis of a National Random Survey of Gun Owners*, 267 JAMA 3033 (1992).

257. *See id.*

258. *See id.*

259. *See id.*

260. *See id.*

261. *See id.*

262. *See id.*

263. *See id.*

264. *Id.*

265. *See id.*

regression was used to estimate the odds ratios of keeping guns loaded when compared to each key variable.²⁶⁶

Analysis revealed that 25% of gun owners kept guns loaded in the home all the time and 12% kept guns loaded some of the time.²⁶⁷ A frightening 53% of gun owners did not keep firearms locked away.²⁶⁸ Owning a handgun, purchasing a gun for protection, and having no children in the home correlated positively with keeping a gun loaded, meaning the presence of these variables increased the likelihood that guns would be stored loaded.²⁶⁹ Gun owners who were careless in storing guns unlocked were also more likely to keep their guns loaded.²⁷⁰ Interestingly (because the NRA promotes education as the primary means of achieving firearms safety²⁷¹), firearms training had no apparent affect on whether persons kept guns loaded.²⁷²

Senturia et al., 1994. This study by Yvonne Senturia and fellow researchers investigated patterns of gun ownership and gun storage practices in the homes of children who visit pediatricians.²⁷³ Parents of 5233 children who attended twenty-nine various pediatric practices located in Chicago, Houston, Georgia, Iowa, New Jersey, South Carolina, and Utah were surveyed regarding firearm ownership and storage after the American Academy of Pediatrics released statements concluding that "the most important step to reducing firearm mortality and morbidity affecting children and adolescents is to reduce the availability of firearms in the environments of children and adolescents, particularly in private homes."²⁷⁴

Firearm ownership was reported in 37% of the households sampled.²⁷⁵ Participants reported the following patterns of firearm storage: 32% of gun owners reported storing ammunition unlocked, 62% of rifles were stored unlocked, 51% of handguns were stored unlocked, and 27% of handguns were stored loaded.²⁷⁶ Families owning rifles reported safer storage practices (only 1% of households

266. See *id.* at 3035.

267. See *id.*

268. See *id.*

269. See *id.*

270. See *id.*

271. See Fact Sheet: "Child Access Prevention" Laws, Are They responsible for the Decrease in Fatal Firearms Accidents Among Children?, Nat'l Rifle Ass'n Headquarters, <<http://nraaila.org/research/19990728-TriggerLockMandatoryStorage-001.html>> (making case against Child Access Prevention laws; promoting NRA's "Eddie Eagle" firearms education program for children).

272. See Weil & Hemenway, *supra* note 256, at 3035.

273. See Senturia et al., *Household Exposure*, *supra* note 4, at 469.

274. *Id.* at 469-70.

275. See *id.* at 471.

276. See *id.*

with rifles stored them unlocked and loaded) than handgun-owning families (13% of handgun-owning families stored them unlocked and loaded).²⁷⁷

Wiktor et al., 1994. Stefan Wiktor and colleagues analyzed the results from a telephone survey of 274 randomly selected New Mexico households to investigate the prevalence of firearms in households and firearm storage practices.²⁷⁸ Of the participating households, seventy-four households (27%) refused to participate.²⁷⁹ This high refusal rate and the inability to verify reported information limit the accuracy of the study's results.²⁸⁰ Firearm storage practices were classified in four categories: (a) all firearms stored locked; (b) at least one firearm stored unloaded and unlocked with no ammunition nearby and no other firearm stored in a less safe manner; (c) at least one firearm stored unloaded and unlocked with ammunition stored nearby; and (d) at least one loaded firearm stored unlocked.²⁸¹ The authors considered the first two categories to constitute safe storage and the last two categories to be unsafe storage.²⁸²

Data analysis revealed that 40% of participating households (seventy-nine households) contained at least one firearm.²⁸³ Twenty-four percent of participants reported unsafe firearm storage practices, 65% reported safe storage practices, and 9% of firearm owners' storage practices were unknown because of an unwillingness or inability to indicate storage practices.²⁸⁴ Guns were stored loaded and unlocked in 5% (10 of the 200) of households.²⁸⁵ Although the difference was not statistically significant, households with young children²⁸⁶ were less likely to follow unsafe storage practices than households with no young children.²⁸⁷

With respect to the type of gun owned, 40% of households containing handguns only engaged in unsafe storage, 13% of households containing rifles only followed unsafe storage practices, and 31% of households with both types of firearms followed unsafe storage practices.²⁸⁸ These results indicate that households with handguns only are three times more likely to store guns unsafely than

277. *See id.*

278. *See* Stefan Wiktor et al., *Firearms in New Mexico*, 161 W. J. MED. 137, 137 (1994).

279. *See id.* at 138.

280. *See id.* at 139.

281. *See id.* at 137-38.

282. *See id.* at 138.

283. *See id.*

284. *See id.*

285. *See id.*

286. "Young children" were classified as children under age 15. *See id.* at 137.

287. *See id.* at 138.

288. *See id.* at 137-38.

are households with rifles, and they support the findings of other studies which concluded that handguns are stored unsafely more often than are rifles.²⁸⁹

Chatterjee & Imm, 1996. Barbara Chatterjee and Pamela Imm analyzed the 1994 Wisconsin Department of Health's telephone survey data to determine the prevalence of firearm ownership and types of gun storage practices in Wisconsin homes.²⁹⁰ The survey included a sample of 1562 households. Participants living in households with firearms were asked if their gun or guns were: (a) stored locked; (b) kept loaded; and (c) whether those practices applied to all, some, or none of the firearms in the household.²⁹¹ Firearm storage practices were categorized as follows: (1) "least risk," meaning all firearms were kept locked and unloaded; (2) "some risk," meaning each firearm was stored with partial precautions (for example, firearms stored locked but loaded, or stored unloaded but unlocked; and (3) "greatest risk," meaning any or all guns were stored loaded and unlocked.²⁹²

The results showed that an estimated 48% of Wisconsin's 1,819,000 households contain at least one firearm and that over half of all those households store firearms with at least some degree of risk (56% did in the study).²⁹³ Forty percent of homes stored guns unloaded but not locked. Three percent of all households fell in the greatest risk category, storing guns both loaded and unlocked.²⁹⁴ In households with children, 58% of respondents reported storage practices in the least risk category (all guns locked and none loaded), a significantly higher percentage than in homes with no children (35%).²⁹⁵ One percent of homes with children reported keeping at least one gun loaded and not locked (greatest risk).²⁹⁶

Senturia et al., 1996. Yvonne Senturia, Katherine Kaufer Christoffel and Mark Donovan designed this pediatric practice-based study to ascertain gun storage patterns in families with children.²⁹⁷ Data from questionnaires completed by 5233 parents of children attending pediatric practices gathered for Senturia's 1994 study were

289. See *id.* at 139.

290. See Barbara Chatterjee & Pamela Imm, *Firearms Prevalence and Storage Practices in Wisconsin Households*, 95 WIS. MED. J. 286, 286-87 (1996).

291. See *id.* at 287.

292. See *id.*

293. See *id.* at 287, 290.

294. See *id.* at 287.

295. See *id.* at 289.

296. See *id.*

297. See Yvonne Senturia et al., *Gun Storage Patterns in U.S. Homes with Children: A Pediatric Practice-Based Survey*, 150 ARCHIVES PEDIATRICS, & ADOLESCENT MED. 265, 265 (1996) [hereinafter Senturia et al., *Storage Patterns*].

reutilized, this time focusing on the 1682 families who reported owning at least one gun.²⁹⁸ Among other topics, the questionnaires asked about gun ownership, types of guns owned, gun storage, and ammunition storage.²⁹⁹ For the purposes of this study, safe firearm storage was defined as storing all guns unloaded and locked in an area separate from ammunition.³⁰⁰

Their analysis showed that 61% of gun-owning families with children reported keeping at least one unlocked gun in the house.³⁰¹ Fifteen percent reported having at least one loaded gun in the house, and 7% reported keeping at least one gun unlocked and loaded in the house.³⁰² Handguns were twelve times more likely to be stored unlocked and loaded than were rifles.³⁰³ Only 30% of households reported storing all guns locked and unloaded.³⁰⁴ Ammunition was stored locked by only 42% of families, while 32% of families stored ammunition in an unlocked place.³⁰⁵

Forjuoh et al., 1996. Samuel Forjuoh, Jeffrey Coben, and Stephen Dearwater investigated household prevalence of guns and gun storage practices of Pennsylvania residents³⁰⁶ using data from a statewide telephone survey³⁰⁷ conducted by the State's Health Department in 1994. The survey gathered information on firearm ownership, firearm storage practices, and household characteristics from 3620 randomly selected households.³⁰⁸ The survey included questions addressing barriers to firearm use, which were in turn used to categorize gun storage practices.³⁰⁹ The six categories of barriers were: (1) whether the firearm was kept in a locked place; (2) whether the gun was stored disassembled; (3) if the gun was not disassembled, whether a trigger lock was used; (4) whether the gun was unloaded;

298. *See id.* at 266.

299. *See id.*

300. *See id.* at 267.

301. *See id.* at 266.

302. *See id.*

303. *See id.*

304. *See id.*

305. *See id.* at 267. Nineteen percent of the families reported keeping no ammunition. *See id.* The study does not account for the missing 7% necessary to make the percentages add up to 100%.

306. *See* Samuel Forjuoh et al., *Firearm Ownership and Storage Practices in Pennsylvania Homes*, 2 *INJ. PREVENTION* 278, 278 (1996).

307. The Behavior Risk Factor Survey ("BRFS") is a health survey conducted by the CDC and Prevention to collect population-based data on behavioral health risks that contribute to the leading causes of death. When states participate in the BRFS, each state's health department typically conducts the actual phone survey. *See id.* at 278-79. The BRFS is a source of data for many of the gun storage studies discussed in this section.

308. *See id.* at 279.

309. *See id.*

(5) if the gun was unloaded, whether ammunition was available; and (6) if the gun was unloaded and ammunition was available, whether the ammunition was kept in a locked place.³¹⁰ Households with multiple firearms were categorized by the least secured firearm.³¹¹

Computerized statistical analysis revealed that 37% of Pennsylvania households contained firearms.³¹² Regarding firearm storage practices, more than 70% of homes with one or more firearms had two or more barriers to firearm use, 22% of homes had only one barrier to firearm use (for example, this category would include homes that keep a gun unloaded but have ammunition available nearby), and 6% of homes contained a gun that was loaded and unlocked with no barriers to its use.³¹³ The storage practices of 23% of survey participants could not be categorized because they refused to answer some questions regarding storage practices, did not know, or were uncertain how to respond.³¹⁴

Goldberg et al., 1996. Bruce Goldberg, Evelyn Whitlock, and Merwyn Greenlick studied the firearm ownership and storage practices of 4999 health care workers belonging to an Oregon health maintenance organization.³¹⁵ A questionnaire was given to 6436 employees, and 78% responded (4,999).³¹⁶ The survey included two questions regarding firearms: (1) "In our community some people keep a gun in their home, others do not. Do you (or does someone else) keep a gun in your home?"; and (2) "If yes, is the gun kept loaded? (If there is more than one gun, answer 'yes' if any one of them is kept loaded.)."³¹⁷ The results disclosed that 42% of the health care workers surveyed owned guns³¹⁸ and that 35% of the gun owners reported keeping a loaded firearm in their home.³¹⁹

Nelson et al., 1996. David Nelson led a group of researchers in an investigation of the exposure of adults and children to loaded and unlocked firearms in Oregon households,³²⁰ using data gathered by the Oregon Health Division through random telephone surveys administered in 1992 and 1993.³²¹ Roughly 75% of those contacted

310. *See id.*

311. *See id.*

312. *See id.* at 279, 281.

313. *See id.* at 280.

314. *See id.*

315. *See generally* Bruce Goldberg et al., *Firearm Ownership and Health Care Workers*, 111 PUB. HEALTH REP. 257 (1996).

316. *See id.* at 257.

317. *Id.*

318. *See id.*

319. *See id.*

320. *See generally* David Nelson et al., *Population Estimates of Household Firearm Storage Practices and Firearm Carrying in Oregon*, 275 JAMA 1744 (1996).

321. *See id.* at 1744.

agreed to participate, resulting in interviews with members of 6202 households.³²² The surveys asked questions regarding firearm ownership and storage practices, with the storage practices being sorted into the following groups: (1) no household firearms; (2) firearms always or sometimes stored loaded and unlocked (least safe storage); (3) firearms stored never loaded and always locked with ammunition always stored locked (safest storage); and (4) all other practices.³²³

The study revealed that 51% of households surveyed owned firearms.³²⁴ Ten percent of adults surveyed reported living in a household with guns that were always or sometimes stored loaded and unlocked.³²⁵ On the other end of the safety spectrum, 11.7% of adults reported living in homes where firearms were always locked away, never stored loaded, and ammunition was always stored locked.³²⁶ Although the results revealed safer firearm storage in homes containing children, an estimated 40,180 Oregon children below age eighteen lived in households where a firearm was always or sometimes stored loaded and unlocked.³²⁷

Powell et al., 1998. Kenneth Powell and fellow researchers studied variations among states concerning household exposure to firearms, loaded firearms, and handguns.³²⁸ Telephone surveys conducted by state health departments in twenty-two states from 1991 through 1995 provided data.³²⁹ Though questions varied somewhat from state to state, participants in the surveys were generally asked if there was a firearm in the household, if there was a loaded firearm in the household, or if there was a handgun in the household.³³⁰ As with all studies based on self-reporting, the methodology limits the reliability of the results.³³¹

Statistical analysis revealed that the percentage of homes that kept loaded guns ranged from 1% in Rhode Island to 23% in Louisiana and Mississippi.³³² Men were more likely to live in households with guns generally; in addition, they were more likely to

322. *See id.*

323. *See id.*

324. *See id.* at 1745.

325. *See id.*

326. *See id.*

327. *See id.* at 1745-46.

328. *See* Kenneth Powell et al., *State Estimates of Household Exposure to Firearms, Loaded Firearms, and Handguns, 1991 through 1995*, 88 AM. J. PUB. HEALTH 969, 969 (1998).

329. *See id.*

330. *See id.*

331. *See id.* at 971.

332. *See id.* at 970.

live in households with handguns and loaded guns.³³³ Adults in households with children³³⁴ were less likely to have handguns or to keep guns loaded, but the study estimated that more than 1.5 million children in a group of eighteen states lived in homes where guns were kept loaded.³³⁵ The percentage of households with children where firearms were kept loaded ranged from 2% in Connecticut and Delaware to 12% in Kansas and Mississippi.³³⁶

Stennies et al., 1999. Gail Stennies, with the assistance of several other researchers, conducted a random telephone survey of English and Spanish-speaking households from the fifty states and Washington, D.C.³³⁷ The data gathered was weighted to better represent the national population.³³⁸ Although 9342 individuals were contacted, 3630 refused to participate.³³⁹ The researchers completed a total of 5238 interviews concerning gun ownership and storage practices.³⁴⁰ Firearm storage practices were grouped in one of three categories: (a) all guns kept unloaded and locked; (b) at least one gun kept loaded and unlocked; or (c) any intermediate answer falling between the categories of (a) and (b).³⁴¹ If storage practices fell in category (c), further questions were administered to determine ammunition storage.³⁴² If storage practices were in category (a) or (b), no questions regarding ammunition storage were administered.³⁴³

Results from data analysis revealed that 33.2% of households (1635) kept a gun in the home.³⁴⁴ The storage practices of 1598 households could be categorized.³⁴⁵ Among those 1598 households, 30% reported storing guns locked and unloaded, 48.5% reported intermediate storage practices, and 21.5% reported storing at least one gun loaded and unlocked.³⁴⁶ From these numbers, the study estimated that 6.8 million American households contain at least one loaded, unlocked firearm.³⁴⁷ Southern households were more likely to store at least one firearm loaded and unlocked (17.6%) compared

333. *See id.*

334. Census data from 1990 was used to estimate the number of children living in homes where guns were kept loaded. *See id.* at 969.

335. *See id.*

336. *See id.*

337. *See generally* Stennies et al., *supra* note 2.

338. *See id.*

339. *See id.* at 588.

340. *See id.*

341. *See id.* at 587.

342. *See id.*

343. *See id.*

344. *See id.* at 588.

345. *See id.*

346. *See id.*

347. *See id.*

to the rest of the country (7%).³⁴⁸

Households with children reported better gun storage practices (41.5% stored guns unloaded and locked) than households with no children (20.9% stored guns unloaded and locked).³⁴⁹ Although 41.5% of households with children claimed to store all guns unloaded and locked, 11.1% of households with children reported storing at least one gun loaded and unlocked.³⁵⁰ The study estimated that 1.6 million U.S. households with children store at least one firearm loaded and unlocked.³⁵¹

C. Summary

The ten public health studies reviewed in this section, while varying in their specifics, are consistent in their frightening findings that millions of guns, many of them already loaded, are easily accessible to unauthorized users of all kinds in millions of homes throughout America. Since almost all storage studies depend on self-reporting in which gun owners must admit reckless behavior to anonymous telephone callers, it is likely the study figures under-report the true numbers of dangerously stored firearms. The studies demonstrate conclusively that optional personal responsibility for safe gun storage—promoted as the solution by the NRA—is not working. Stronger measures are needed to ensure that gun owners act responsibly to safeguard their dangerous instrumentalities from access by unauthorized users, including suicidal adolescents. Mandatory safe storage laws are one answer.

IV. Legislatively-Mandated Safe Firearms Storage

If all firearms were securely stored, there would be fewer firearms tragedies of all varieties, including adolescent suicide. The public health studies linking firearms to suicides in general,³⁵² and to adolescent suicides in particular,³⁵³ strongly support the proposition that, were guns not easily available to impulsive teenagers in despair, fewer of them would commit suicide. Research shows that most adolescent suicide attempters do not really wish to die,³⁵⁴ but firearms are an unforgiving method of suicide.³⁵⁵

348. *See id.*

349. *See id.*

350. *See id.*

351. *See id.*

352. *See supra* notes 97-147 and accompanying text.

353. *See supra* notes 148-197 and accompanying text.

354. *See supra* notes 72-73 and accompanying text.

355. *See supra* notes 65-80 and accompanying text for a discussion of the lethality of firearms as a method of suicide.

Fourteen states already have a form of safe storage law for firearms.³⁵⁶ Known as Child Access Prevention ("CAP") laws, these statutes are aimed at reducing accidental shootings by children. CAP laws impose criminal penalties for the negligent storage of a firearm when a child gains possession of the gun and uses it to cause harm. A proposal for a federal CAP law was part of a package of gun control laws that President Clinton proposed to the 106th Congress,³⁵⁷ without success. A similar proposal was also introduced in the previous session of Congress.³⁵⁸

The author has previously called on Congress to pass a federal CAP law as a means of reducing accidental shootings as well as third-party intentional shootings resulting from criminals gaining access to unsecured guns.³⁵⁹ CAP laws, by giving gun owners an incentive to safely store firearms, also would be likely to decrease adolescent suicides. However, CAP laws suffer from several deficiencies that weaken their effectiveness as a means for keeping guns out of the hands of adolescent suicide attempters and other unauthorized users.

The first major problem with existing CAP laws is that all of them, except one, apply only to loaded firearms.³⁶⁰ This is an

356. See CAL. PENAL CODE § 12035 (West 1992 & Supp. 1999); CONN. GEN. STAT. § 29-37i (West 1990 & Supp. 1999); DEL. CODE ANN. tit. 11, § 1456 (1995); FLA. STAT. ANN. § 784.05 (West 1992 & Supp. 1999); HAW. REV. STAT. § 134-10.5 (1993); IOWA CODE § 724.22 (1999); MD. ANN. CODE art. 27, § 36K (1996); MINN. STAT. ANN. § 609.666 (West 1987 & Supp. 2000); N.J. STAT. ANN. § 2C:58-15 (West 1995 & Supp. 1999); N.C. GEN. STAT. ANN. § 14-315.1 (West 1993 & Supp. 1998); R.I. GEN. LAWS §§ 11-47-60.1 (1954); TEX. PENAL CODE ANN. § 46.13 (West 1994 & Supp. 2000); VA. CODE ANN. § 18.2-56.2 (Michie 1996); WIS. STAT. § 948.55 (West 1996 & Supp. 1999). Although Nevada is frequently included on lists of states with CAP laws, the Nevada statute is not a criminal safe storage statute, but a civil liability statute concerned with the negligent entrustment of firearms to minors. See NEV. REV. STAT. § 41.472 (1996). For a detailed analysis of the different state CAP laws and the proposed federal CAP laws, see McClurg, *Child Access Prevention Laws*, *supra* note 8, at 61-69.

357. See Letter from Eleanor D. Acheson, Assistant Attorney General, U.S. Department of Justice, Office of Policy Development, to Andrew J. McClurg (June 30, 1999) (on file with author) (stating that President Clinton had proposed to Congress a package of gun control legislation that included child access prevention provisions; that the House of Representatives defeated that package on June 18, 1999, and that the Administration continues to be hopeful that certain provisions contained in Senate-passed version of package will survive in Senate and House conference); see also S. 735, 106th Cong. § 401 (1999) (containing child access prevention provision as Title IV of Children's Gun Violence Prevention Act of 1999).

358. See S. 2185, 105th Cong. (1998); H.R. 4073, 105th Cong. (1998).

359. See McClurg, *Child Access Prevention Laws*, *supra* note 8, at 57-60.

360. See *id.* Only the Hawaii CAP statute does not expressly limit liability to loaded firearms. See HAW. REV. STAT. § 134-10.5 (1993). The Hawaii statute states: "No person shall store or keep any firearm . . . if the person knows . . . that a minor is likely to gain access to the firearm." *Id.* The language "any firearm" implies that the statute includes loaded and unloaded firearms.

unreasonable limitation because an unloaded and unlocked gun stored in a house with unlocked ammunition is just as dangerous as a loaded gun. Certainly, this is true with respect to suicidal teens, most of whom would have little trouble figuring out how to load ammunition into a gun.

Second, state CAP laws are too limited as to whom they seek to protect. Three state CAP laws apply only if the person who gains access to the gun and causes harm is under age fourteen.³⁶¹ Seven other laws apply to children under age sixteen.³⁶² Guns need to be kept secure from unauthorized users of all ages. By any rational appraisal, the age limit should be at least eighteen years, the minimum age for legally purchasing any type of firearm under federal law.³⁶³ However, the author submits that age limitations should not be a part of safe storage laws. Safe storage laws should be constructed to give gun owners an incentive to keep guns secure from unauthorized users of all ages.

A third defect is that existing state CAP laws are riddled with defenses that undermine the goal of universal safe firearms storage. For example, eleven of the fourteen state CAP statutes contain an "illegal entry" defense that excuses gun owners from responsibility for negligent storage if the child gains access to the gun as a result of a burglary or other illegal entry.³⁶⁴ Such a defense is not justified. Unauthorized users acquire millions of guns by theft.³⁶⁵ The FBI's *National Crime Victimization Survey Report* estimates that 5,482,720

361. See IOWA CODE § 724.22(7) (1999); VA. CODE ANN. §§ 18.2-56.2(A) (Michie 1996); WIS. STAT. § 948.55(1).

362. See CAL. PENAL CODE § 12035(a)(3) (West 1992 & Supp. 1999); CONN. GEN. STAT. § 29-37i(2) (West 1990 & Supp. 1999); FLA. STAT. ANN. § 784.05(4) (West 1992 & Supp. 1999); HAW. REV. STAT. § 134-10.5(2) (1993); MD. ANN. CODE art. 27, § 36K(a)(3) (1996); N.J. STAT. ANN. § 2C:58-15(c) (West 1995 & Supp. 1999); R.I. GEN. LAWS §§ 11-47-60.1(B) (1954). Among the other states with CAP laws, the Texas statute applies to children under 17, see TEX. PENAL CODE ANN. § 46.13(a)(1) (West 1994 & Supp. 2000), and the statutes in Minnesota, see MINN. STAT. ANN. § 609.666(1)(b) (West 1987 & Supp. 2000), Nevada, see NEV. REV. STAT. § 41.472(1) (1996), and North Carolina, see N.C. GEN. STAT. ANN. § 14-315.1(d) (West 1993 & Supp. 1998), apply to children under 18. The Delaware statute contains no express age limit, referring only to "minors." See DEL. CODE ANN. tit. 11, § 1456(a) (1995). A review of the Delaware code did not disclose any general definition of "minor."

363. Eighteen is the minimum age to purchase a long-gun (i.e., rifle or shotgun); 21 is the minimum age to purchase a handgun. See 18 U.S.C. § 922(b)(1) (Supp. 1998).

364. See CAL. PENAL CODE § 12035(c)(1); DEL. CODE ANN. tit. 11, § 1456(b)(2); FLA. STAT. ANN. § 784.05(3)(b); HAW. REV. STAT. § 707-714.5(2); MD. ANN. CODE art. 27, § 36K(c)(2); MINN. STAT. ANN. § 609.666(3); N.J. STAT. ANN. § 2C:58-15(b)(2); N.C. GEN. STAT. ANN. § 14-315.1(c); R.I. GEN. LAWS §§ 11-47-60.1(C)(1); TEX. PENAL CODE ANN. § 46.13(c)(3); WIS. STAT. § 948.55(4)(e).

365. The FBI's National Crime Information Center contained more than two million reports of stolen guns as of March 1995. See ZAWITZ, *supra* note 7, at 3.

burglaries occurred in 1994.³⁶⁶ From 1985 to 1994, an annual average of 274,000 firearms were reported stolen to the FBI.³⁶⁷ Given that burglaries are easily foreseeable events and guns are prime targets for thieves of all ages, the illegal entry defense, although well intended, is misguided.

Six state CAP laws also include a "close proximity" defense that relieves gun owners of the duty to secure firearms that are kept within close proximity of the owner.³⁶⁸ This defense subverts the very purpose of safe storage statutes. An exception that encourages gun owners to leave unlocked, loaded guns lying around the house or in automobiles is an unwise one. It will predictably lead to more gun tragedy because even the most careful gun owners are not going to be attentive 100% of the time.³⁶⁹

The principal problem with existing CAP laws is that they fail to actually require that guns be safely stored and also fail to specify what constitutes safe storage. CAP laws provide for criminal responsibility if a child obtains a negligently stored gun and uses it to cause harm. However, they do not go the next step and affirmatively mandate that guns be safely stored.

Moreover, CAP laws fail to define what constitutes adequate storage with sufficient specificity. A substantial majority of CAP statutes create a "safe storage" immunity from criminal responsibility for gun owners who act reasonably in securing their firearms.³⁷⁰ While such a defense is clearly desirable, both the public and gun owners would be better served if the statutes explicitly defined effective safe storage standards. Current statutes define safe storage in general terms, typically stating that the gun owner is protected if the gun was kept in a safe storage box³⁷¹ or was stored with a trigger

366. See BUREAU OF JUST. STATS., U.S. DEP'T. JUST., CRIMINAL VICTIMIZATION IN THE UNITED STATES, 1994, NATIONAL CRIME VICTIMIZATION SURVEY REPORT, NO.NCJ-162126 58 (1997).

367. See ZAWITZ, *supra* note 7, at 3.

368. See CAL. PENAL CODE § 12035(c)(3); CONN. GEN. STAT. § 29-37i(2) (West 1990 & Supp. 1999); HAW. REV. STAT. § 134-10.5(2); N.C. GEN. STAT. ANN. § 14-315.1(b); R.I. GEN. LAWS §§ 11-47-60.1(C)(3); WIS. STAT. § 948.55(4)(c).

369. As one newspaper columnist observed:

[P]eople get busy. Once the newness of carrying a gun wears off, the firearm becomes commonplace Most of us spend a relatively small percentage of our time repelling armed marauders. The rest of the day is devoted to earning a living, grocery shopping, getting the kids to soccer practice and satisfying the innumerable demands of daily life. During this hectic swirl, the gun becomes just one more item—like your car keys or eye glasses—to be mislaid, lost or forgotten.

M.W. Guzy, *Soft Logic of Hard Facts on Guns*, ST. LOUIS POST-DISPATCH, July 22, 1998, at B7.

370. See *infra* notes 371-372 and accompanying text.

371. See CAL. PENAL CODE § 12035(c)(2); CONN. GEN. STAT. § 29-37i(1); DEL. CODE

lock.³⁷² To be effective, a safe storage statute should be specific in requiring that all firearms be stored in non-portable lock boxes or equipped with devices or technology designed to deny access to firearms by unauthorized users of all ages: children, adolescents and adults. The laws of Australia and Canada provide useful examples.

In the wake of the "Port Arthur Massacre" in which Martin Bryant killed thirty-five people with an American-made assault weapon,³⁷³ the Australian Police Ministers' Council agreed, in May 1996, to sweeping uniform gun laws proposed by Prime Minister John Howard and Attorney General Daryl Williams.³⁷⁴ Included in the laws are very specific safe storage standards. Shotguns and non-semiautomatic rifles (Category A and B weapons) must be stored in a locked hardwood or steel receptacle weighing more than 150 kilograms or fixed to a building.³⁷⁵ Semiautomatic rifles and handguns (Category C, D, and H weapons) must be stored in a steel safe fixed to the building.³⁷⁶ All ammunition must be stored in separate locked containers.³⁷⁷

Canada also has strict safe storage laws for firearms.³⁷⁸ First, all

ANN. tit. 11, § 1456(b)(1) (1995); FLA. STAT. ANN. § 784.05(3)(a) (West 1992 & Supp. 1999); HAW. REV. STAT. § 134-10.5(1); IOWA CODE § 724.22(7); N.J. STAT. ANN. § 2C:58-15(a)(1) (West 1995 & Supp. 1999); R.I. GEN. LAWS §§ 11-47-60.1(C)(2); WIS. STAT. § 948.55(4)(a).

372. See CAL. PENAL CODE § 12035(c)(4); FLA. STAT. ANN. § 784.05(3)(a); IOWA CODE § 724.22(7); N.J. STAT. ANN. § 2C:58-15(a)(3); R.I. GEN. LAWS §§ 11-47-60.1(C)(4); WIS. STAT. § 948.55(4)(b).

373. See Jeff Brazil & Steve Berry, *Australia's Answer to Carnage: "A Strict Law,"* L.A. TIMES, Aug. 27, 1997, at A1.

374. See *The New Australian Gun Laws: Progress At Last*, *Playfix.com.au* (visited Mar. 25, 2000) <<http://www.playfix.com.au/weapons/laws.html>>.

375. The Australian laws divide firearms into five categories: A, B, C, D, and H. Category A encompasses air rifles, non self-loading rimfire rifles, and shotguns. Category B includes single shot, double barrel, repeating centerfire rifles, and break action shotgun/rifle combinations. Category C covers semiautomatic rimfire rifles with a magazine capacity up to 10 rounds, semiautomatic shotguns up to five rounds, and pump action shotguns up to five rounds. Category D includes semiautomatic and automatic centerfire rifles, semiautomatic and pump action shotguns with a magazine capacity over five rounds, and semiautomatic rimfire rifles over 10 rounds. Category H covers all handguns. See *id.*

376. See *id.*

377. See *id.*

378. David B. Kopel, a friend, colleague and textbook co-author of the author, paints the Canadian storage statutes as Orwellian in nature. See generally Kopel, *supra* note 247. Kopel states: "In the hands of anti-gun lobbies and government bureaucrats . . . 'safe storage' becomes an Orwellian term designed to negate the many safety benefits of the right to bear arms." *Id.* Kopel notes that David Tomlinson, president of Canada's National Firearms Association, takes the position that gun storage laws are unenforceable without random police searches of the home. See *id.*

The author certainly does not support random police searches of homes, which are

firearms must be stored unloaded,³⁷⁹ and no firearm may be stored with ammunition unless the ammunition is kept in a separate locked container.³⁸⁰ Moreover, all firearms must be stored in a manner that renders them inoperable.³⁸¹ For most firearms, this requires that they be stored with an attached locking device *and* kept in a securely locked container or room constructed so it cannot be easily broken open or in a locked vault or room that has been specifically constructed for the purpose of securely storing firearms.³⁸²

While CAP laws are a promising step, state legislatures and Congress need to look at the issue of safe firearms storage more broadly. Our goal should be the safe and secure storage of all of our nation's abundant firearms. To achieve that goal, we need mandatory safe storage laws that include specific storage requirements designed to ensure that guns will be inaccessible to suicidal teens and other unauthorized users. These laws should be backed up by criminal penalties for violations and civil tort liability for harm that proximately results from negligent storage. Responsible gun owners have nothing to fear from safe storage laws. To the contrary, responsible gun owners would benefit from clearly articulated storage standards. By complying with the standards, they could ensure protection from criminal or civil liability.

V. Conclusion

Unfettered access to millions of unlocked guns contributes to the

prohibited by the Fourth Amendment to the United States Constitution. The fact that a safe storage law would, like many other criminal laws (including drug and other possessory offenses), be difficult to enforce is not a valid argument against such a law. It may well be that many safe storage violations would come to light only where the violation has resulted in tragedy. The ensuing publicity generated by prosecution of the offender would help deter other potential violators. Moreover, if the gun lobby is correct in its frequent proclamations that most gun owners are law-abiding citizens, we could expect most gun owners to honor the laws of the land without the threat of police searches. Finally, when one thinks of Canada, the image generated is hardly one of a totalitarian state.

Another objection to safe storage laws is that they would interfere with the use of a firearm for self-defense. See John R. Lott, Jr., *Childproof Gun Locks: Bound to Misfire*, WALL ST. J., July 16, 1997, at A22 (arguing that a trigger lock requirement for guns would likely greatly increase deaths resulting from crimes). The author has previously refuted this argument. See McClurg, *Tort Liability for Negligent Storage of Firearms*, *supra* note 8, at 1212-14. One indicator that the argument is a hollow boogeyman lies in the fact that 14 states have CAP laws, including three of the four most populous states—California, Florida, and Texas—yet there is not a single recorded incident in which a person has suffered injury from a criminal due to an inability to gain access to a secured firearm.

379. See Storage, Display, Transportation and Handling of Firearms by Individuals Regulations, C.R.C., SOR/98-209, §§ 5(1)(a), 6(a) (1998) (Can.).

380. See *id.* at §§ 5(1)(c), 6(c).

381. See *id.* at §§ 5(1)(b), 6(b).

382. See *id.* at § 6(b).

United States having the highest adolescent suicide rate in the world.³⁸³ Our firearm suicide rate for children under fifteen is eleven times higher than that of any other industrialized nation.³⁸⁴ A prime explanation for this grim statistic is that we are a nation awash in readily available firearms. Eleven studies reviewed in this Article document the link between higher suicide rates and easy access to guns.³⁸⁵ The largest study of its kind found that guns in the home are associated with an almost fivefold increase in the risk of suicide.³⁸⁶

Even the NRA admonishes that guns must be safely stored.³⁸⁷ Yet, the organization opposes safe storage laws, favoring optional personal responsibility for gun safety instead.³⁸⁸ However, that approach clearly is not working. Ten public health studies reviewed in this Article establish that millions of American gun owners negligently store their firearms.³⁸⁹

Unsecured firearms in the home contribute not only to adolescent suicides and to hundreds of accidental shootings each year, but also to criminal misuse stemming from the hundreds of thousands of firearms stolen from homes annually. With more than 220 million privately-owned firearms³⁹⁰ in 40% of U.S. homes,³⁹¹ this country is in dire need of mandatory safe storage laws as a way to reduce gun tragedy of all types resulting from unauthorized users gaining access to unsecured guns. Gun owners may view mandatory safe storage laws as an unwarranted government intrusion, but that view is outside the mainstream of public opinion. Reliable survey data shows that more than 70% of Americans favor laws requiring that guns be stored in a locked box or cabinet.³⁹²

At the moment this sentence is being read, somewhere in America, a despondent adolescent is contemplating suicide. Perhaps he is upset over a break-up with his girlfriend. Maybe he got in trouble over a bad report card. The problems might be worse. He might be struggling with his sexual orientation or with a substance abuse problem. Whatever the cause of his despair, if he has located a firearm, he may be dead by now.

Without easy access to a firearm in his home, he will live long enough at least to contemplate his actions further. Will he be

383. See *supra* notes 240-241 and accompanying text.

384. See Krug, *supra* note 17 and accompanying text.

385. See *supra* notes 81-199 and accompanying text.

386. See *supra* notes 135-147 and accompanying text.

387. See *supra* note 248 and accompanying text.

388. See *supra* notes 247-248 and accompanying text.

389. See *supra* notes 255-351 and accompanying text.

390. See *supra* note 62 and accompanying text.

391. See *supra* note 63.

392. See *supra* note 250 and accompanying text.

committed enough to the idea of suicide to find another method? Possibly, but not likely. Adolescents often attempt suicide impulsively, as a "temporary" way to escape pain.³⁹³ Forced to take time to reflect on their actions, many potential suicide attempters will change their minds about dying. Even in the worst-case scenario where our desperate teen is so firmly dedicated to committing suicide that he seeks out another method, he will be better off because no method for attempting suicide is as lethal as a firearm.³⁹⁴

Firearms kill 36,000 people each year³⁹⁵ and seriously injure an estimated 100,000.³⁹⁶ Courts regularly brand guns as "inherently dangerous instrumentalities," subjecting their owners to the "highest degree of care," even a slight deviation from which constitutes negligence.³⁹⁷ Surely, the highest degree of care in handling a dangerous instrumentality includes something as basic as safe storage of that instrumentality.³⁹⁸ It is reasonable to demand that persons who choose to keep in their homes an inherently dangerous product which has as its only purpose the infliction of death and serious bodily harm act responsibly to keep it secure from unauthorized users.

393. See *supra* notes 55-64 and accompanying text.

394. See *supra* notes 74-80 and accompanying text.

395. See *supra* note 92 and accompanying text.

396. See *id.*

397. See, e.g., *Bridges v. Dahl*, 108 F.2d 228, 229 (6th Cir. 1939) (stating that utmost caution must be exercised by those in possession and control of dangerous instrumentalities such as firearms and explosives); *Jacoves v. United Merchandising Corp.*, 11 Cal. Rptr. 2d 468, 486 (Ct. App. 1992) (civil law classifies firearms as "inherently dangerous instrumentalit[ies]" which impose on users a duty to employ "exceptional precautions to prevent injury"; distinguishing firearms from other products that are capable of being used to inflict harm, such as knives and golf clubs, because of the unusual dangers presented by firearms); *Long v. Turk*, 962 P.2d 1093, 1096 (Kan. 1998) (court had "no difficulty conceding that a .357 Magnum handgun is a dangerous instrumentality" which requires the highest degree of care in safeguarding); *Strever v. Cline*, 924 P.2d 666, 671 (Mont. 1995) (stating firearm is dangerous instrumentality that requires a higher degree of care in use and handling); *Luttrell v. Carolina Mineral Co.*, 18 S.E.2d 412, 417 (N.C. 1942) (those having possession and control of dangerous instrumentalities such as firearms and explosives owe highest degree of care; utmost caution must be exercised in their care and custody).

398. Federal law imposes detailed storage requirements for other dangerous instrumentalities such as explosives. See 29 C.F.R. § 1926.904 (1999) (stating all explosives must be stored in approved facilities in accordance with regulations); 27 C.F.R. §§ 55.29-55.224 (1999) (detailing storage requirements for explosives).
